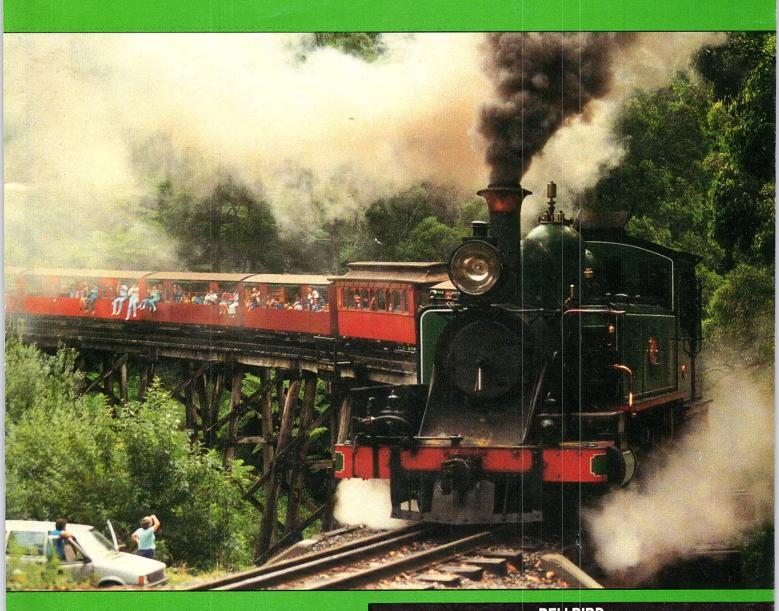
\$4.00*

APRIL 1990

Australian Australian AUSTRALIAN AUSTRALIAN AUSTRALIAN

Issue 161, Vol. 14. No.8



Registered by Australia Post — Publication No.NBH0729 * Recommended Retail Price Only

BELLBIRD

VR Class S

Tuning AR's 45 Class

UNDER LIVE WIRES – 4

POWERLINE CATALOGUE

Sole Australian Agents

The Professionals' Track

Sn3, HO CODE 100 — 83 — 70, DUAL, HOn3, HOn2¹/₂, 12mm, 9mm

THE LOCOMOTIVE WORKSHOP

Use your Credit Card









AVAILABLE APRIL

BOTH VERSIONS IN V.R. AND V/LINE with lighting and NEW "Magic Carpet" Drive \$595

DUE TO DEMAND WE HAVE PICKED UP THE REMAINING **FACTORY MODELS**

AVAILABLE APRIL @ \$595

Power Car and Trailer (unpainted)





PAINTED AND LIT UNPAINTED AND LIT \$1035

AVAILABLE!

in On3, On21/2, On2



ACCLAIMED IN AMERICA AS "BEST EVER"

ALCO-AJIN "The people who will give you lower prices, more detail and better running."

"LEADING THE WAY"

P.O. BOX 173, BORONIA, VICTORIA 3155 . Phone: (61-3) 762 3189 . Fax: (61-3) 762 8807

Australian Prototypes

Lima's range of ready to run Australian Prototypes is second to none! All prototypes are accurately painted and detailed, featuring the usual high performance and reliability for which Lima is well known.

Featured below are just some of Lima's range of Australian Prototypes.



RETAILERS CONTACT: HEAD OFFICE (08) 276 7722 NSW (02) 85 5684, VIC (03) 810 9572, QLD (075) 64 5044, WA & TAS (08) 276 7722

BACK ISSUES

The following issues are available subject to prior No.93 - November/December 1978 *
No.95 - March/April 1979
No.96 - May/June 1979 *
No.97 - July/August 1979 *
No.98 - September/October 1979
No.99 - November/December 1979 *
Above issues are priced at 90c a copy, plus post.
No.100 - January/February 1980 *
No.101 - March/April 1980
No.102 - May/June 1980 *
Above issues are miced at 90c a copy.
May/June 1980 *

No.104 No.105 Above is No.108 No.109 No.110 No.111

No.110 - September/October 1981
No.111 - November/December 1981
Above issues are priced at \$1.50 a copy, plus post.
No.112 - February 1982
Above issue is priced at \$1.50 a copy, plus post.
No.113 - April 1982
No.114 - June 1982
No.115 - August 1982
No.116 - October 1982
No.117 - December 1982
No.118 - February 1983
Above issues are available at \$1.80 a copy, plus post.
No.119 - April 1983
No.120 - June 1983
No.121 - August 1983
No.122 - October 1983
No.122 - October 1983
No.123 - December 1983

December 1983

No.122 - December 1983
No.124 - February 1984
Above issues are available at \$2.00 a copy, plus post.
No.125 - April 1984
No.126 - June 1984
No.127 - August 1984
No.128 - October 1984
No.129 - December 1984
No.130 - February 1985
No.131 - April 1985
No.131 - April 1985
No.132 - June 1985
No.133 - August 1985
No.134 - October 1985
No.135 - December 1985
No.136 - February 1986
No.138 - June 1986
No.138 - June 1986 No.124 -Above issues No.125 -No.126 -No.127 -No.128 -No.129 -No.131 No.132 No.133 No.134 No.135 No.136

No.138 - June 1986
No.139 - August 1986
No.140 - October 1986
Above issues are available at \$2.50 a copy, plus post.
No.141 - December 1986
No.142 - February 1987
No.143 - April 1987
No.144 - June 1987
No.145 - August 1987
No.146 - October 1987
No.147 - December 1987
No.147 - December 1987
No.148 - February 1988
No.150 - June 1988
No.150 - June 1988
Above issues are 1988
Above issues are 1988

No.150 - June 1988
Above issues are priced at \$3.00 a copy, plus post.
No.151 - August 1988
No.152 - October 1988
No.153 - December 1988
Above issues are priced at \$3.50 a copy, plus post.
No.154 - February 1989
No.155 - April 1989
No.156 - June 1989
No.156 - June 1989 August 1989 October 1989 December 19 No.159 - December 1989 No.160 - February 1990 Through to the current issue are available at \$4.00 a copy,

plus postage

Stocks of these issues are low and supply at any outlet cannot be quaranteed. Poor quality copies may be supplied. Substitute copies should be given.

POSTAGE

One copy - voverseas \$2.00. within NSW 1.15c; outside NSW \$1.30c;

Two copies - within NSW \$1.80c; outside NSW \$2.50c; overseas \$3.30.

			21 &
No. of Copies	3-9	10-20	over
New South Wales	4.60	5.25	6.55
Victoria	5.90	7.75	11.45
Sth Australia, Tasmania, Q'land	7.20	10.35	16.65
Nth. Territory & West Aust.	8.50	12.90	21.70
Overseas - Ásia/Oceania	10.80	18.00	30.00
Overseas - Other Countries	11.20	19.00	32.00

Please nominate a second choice where the low supply asterick is shown. Please list issues required on a sheet of paper separate from any other matter, complete with printed postage instructions (i.e. name and address).

If including stamps as part payment, please ensure that the face value of each stamp does not exceed the standard postage rate of 41c. (Max payment permitted with stamps - \$4.10.) Please allow at least 21 days for the delivery of goods.

Post your order to:

SCR PUBLICATIONS P.O. Box 4 LITTLE BAY. 2036

NEW BOOK

A COMPENDIUM OF NEW SOUTH WALES STEAM LOCOMOTIVES

Compiled by Alex Grunbach

Following much thought and consideration, the New South Wales Division of the Society has abandoned the plan to publish Locomotives of NSW 1855-1980 in five volumes. The original first four volumes, covering all of the steam locomotive classes have now been re-combined into one volume - A Compendium of New South Wales Steam Locomotives.

With 312 pages in A4 size, all of the original information has been retained, including the expanded tabulations started in volume one of 'Locomotives'. There are 445 illustrations. including 20 in colour. There is a colour cover on the book.

Locomotives are listed in chronological order of introduction. Some additional details of the construction of a locomotive have been added to help the readers who have not lived through the peak of the steam era to understand more.

\$39.95 - Soft bound, available from many retailers and ARHS NSW Sales.

\$49.95 - Special limited edition hard bound copies available only from ARHS NSW Sales.

Handling \$4.00.

Mail orders to:

ARHS NSW Sales PO Box E129 ST JAMES NSW 2000

25 Year Index

Australian

MODEL RAILWAY

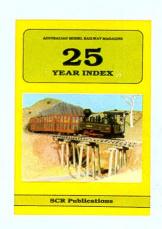
Magazine

is now available from your local supplier.

Price: \$4.00

Or by post from:

SCR Publications. PO Box 4, Little Bay, 2036.



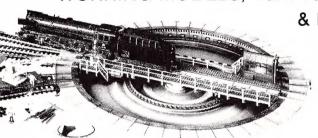
Bill

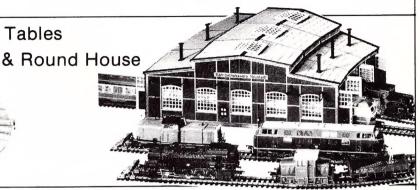
Amy & John Seatonberry

Model Railways

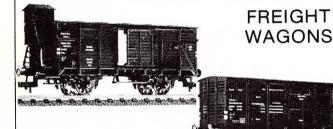
P.O. BOX 380, STRATHPINE, QLD. 4500 PHONE: (07) 285 3883 FAX: (07) 285 4444







WE SUPPLY ONLY NEW STOCK



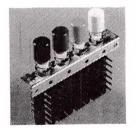
Vollmer, Sommerfeldt, Marklin Catenary



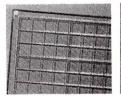
THE MAIL ORDER FIRM with PERSONAL ATTENTION

ELECTRICAL Switches & Plugs





Scratch Building Material







Postage is included in the price (Australia) CATALOGUES IN STOCK -AIRMAIL EXTRA \$2.50 **LEMACO** FLEISCHMANN HO & N Guage BEMO Narrow Guage HOe, HOm HAG AC & DC Swiss HO \$9.50 \$11.60 FALLER Kits HO, N & Z **NOCH** Modelling Access \$6.20 \$8.00 MARKLIN HO Gauge \$10.00 ROSKOPF HO Commerical & MARKLIN Z Gauge \$7.50 \$2.80 Military Vehicles MARKLIN No. 1 Gauge \$21.00 ARNOLD N Gauge \$10.00 SEUTHE HO Smoke Gen S.A.E. **HELJAN HORN Aust & USA** & Cleaning Aid Brochure \$6.50 **METROPOLITAN** HO Brass SOMMERFELDT Catenary HO, N \$13.00 **ROXY** HO Swiss & Narrow Gauge HOm \$6.50 SOMMERFELDT Install Man \$12.00 \$13.50 ROCO HO Gauge only \$9.00 ROCO N Gauge only \$10.00 VOLLMER Kits HO, N & Z \$9.00 SALOTA Multi Train Control \$7.50 KIBRI Kits HO, N & Z $\bar{\Box}$ List of European BOOKS, VIDEOS, BRAWA HO, N & Z Lights etc. \$11.00 SAE Trolley-Bus Operation \$18.00 MAGAZINES & Track Plans MERTEN Figures HO, TT. N.Z.O. \$5.00 **HORNBY** HO \$10.00 PREISER Figures HO-N-IG \$11.00 \$11.00 MINITRIX N PECO Rail Book HO-N-Z \$8.00 POLA Building HO-N \$8.80 SAE POLA Building 1 \$6.50 Spiral Kits List LILIPUT HO \$11.50 SAE REPA Uncoupler HO-N HOm \$14.80 **MARKLIN DIGITAL** \$23.40 FMZ Control Book Other Catalogues supplied against firm orders — Price on application. Terms: COD, Bankcard, Master Card, Visa, Amex

SOUTHERN CROSS MODEL RAILWAY ASSOCIATION

Secretary:

Bob Gallagher

Membership Enquiries:

P.O. Box 235, MATRAVILLE, 2036 Phone (02) 661 4046

The Annual Membership Fee for S.C.M.R.A. is \$27.00 from March to February and the Joining Fee is \$18.00, which includes the membership data pack. Applications must be received by the first of the odd month to meet our mailing list deadlines. For applications received between the 2nd September and the 2nd January the Annual Fee is \$13.50 plus the (\$18.00) loning Fee (does not include October the (\$18.00) Joining Fee (does not include October issue of AMRM).

Membership entitles you to participate in the activities of the Association, to receive A.M.R.M. and our regular news-sheet 'Booster'. Standards, our regular news-sheet Booster. Standards, Recommended Practices and Information Sheets covering model railway practice are included in the joining kit together with a vinyl ring binder and are also issued at regular intervals.

For further details write to the Secretary or contact the divisional representative.

Meetings are usually organised on the second Saturday of each month in New South Wales, Victoria and Queensland. For further details and location please contact the divisional representative.

Membership services include magazine binders and photocopies of articles from out of print issues of AMRM at discount prices.

DIVISIONAL REPRESENTATIVES: New South Wales:

George Giraldi 322 Elizabeth Drive, MT. PRITCHARD, 2170. Ph. (02) 602 3117.

Queensland:

Greg Reason M/S 525 IPSWICH, 4306 Ph. (075) 64 4516.

Victoria:

David Brown 13 Prospect Street, MT. WAVERLEY, 3149. Ph. (03) 808 6866.

MEETINGS

New South Wales

Clinics at Epping April 7 May 12 Seminar at Strathfield June 9 Meadowbank Exhibition

Queensland

April 7 May 12 Ring for Details Ring for Details - Ring for Details June 9

Victoria

April 9 May 14 Scratchbuilding clinic Scratchbuilding clinic Scratchbuilding clinic

S.C.M.R.A. SERVICE DIVISION

The Southern Cross Model Railway Association offers A.M.R.M. readers a number of services.

Photocopies of out of print issues of A.M.R.M. are available at a cost of 20c a page plus postage. A minimum charge of \$1.00 is applicable. Just check the indexes for the article you require and write to the S.C.M.R.A. Service Division, with (estimated) payment. Extra payment, if needed will be advised.

Magazine Binders for AMRM and other similar sized magazines are available in blue vinyl and are equipped with twelve wire holders. A name sheet indicating the magazine's title and volume number for insertion in the plastic pocket on the binder spine is included with each order. Each binder costs \$10.00, postage within Australia included.

For further details on service items write to:-

S.C.M.R.A. P.O. Box 235, MATRAVILLE. 2036.

N-SCALE

PLASTIC INJECTION MOULDED KITS

		With E	Bogies	With	out Bogies
NSW GLX (NLGX)	45' Bogie Louvre Van **	101 \$	17.35	201	\$ 13.60
NSW BCH/FWH	Coal/Wheat Hopper	102	18.75	202	15.00
NSW BLH (NHLA)	Limestone Hopper	103	17.35	203	13.60
NSW HGM (NOGF)	40' Bogie Open Wagon	104	17.35	204	13.60
NSW GP (NOGF)	40' Bogie Open Wagon	105	17.35	205	13.60
NSW MLE (NFLF)	45' Bogie Flat Wagon	106	14.55	206	10.80
NSW NRY (NRNY)	38' Bogie 'Reefer'	107	18.00	207	14.25
NSW HLX (NLHX)	45' Bogie Louvre Van	108	18.00	208	14.25
	GLX kit now has brake gear p	arts incli	ided		

EPOXY RESIN ONE-PIECE KITS

NSW ABV/CV 4 wheel vans, complete with Peco Chassis 301 \$ 18.65

ETCHED BRASS BODY/CONVERSION KITS

NSW 73 Class Diesel Shunter, Body Shell Kit	601	\$ 69.95
NSW 40 Class Diesel Conversion Kit (limited run)	602	Sold Out
NSW 70 Class Diesel Hydraulic, Body Shell Kit	603	69.95

WHITE METAL BODY KITS

NSW CPH 'Tin Hare' Railmotor Kit - Dummy unit only with bogies

701 \$ 48.95

DETAIL PARTS

3 Piece Brake Gear Sets (12), plastic	801	\$8.95
3AG 6 wheel bogie passenger sideframes (4), whitemetal	802	5.95
Ladders, plastic (6 x 50mm pieces)	803	3.50

DECAL SETS

NSW Guard's Vans, Freight - all types	901	\$ 5.65
NSW 'S' Trucks. 30 different pre-numbered sets	902	5.65
NSW GLX/TLX Vans. 10 different. Extra sets for 101 kit	903	5.65

1989/90 CATALOGUE

\$ 4.50 POST PAID

Check your local Hobby Shop First

Direct Orders - prices as listed above plus postage.

Payment by Bankcard, Visa or Mastercard only.

We no longer accept personal cheques for direct orders.

N-TRAINS P.O. Box 257, MERRYLANDS, NSW, 2160.

COFFS HARBOUR **MODEL RAILWAY EXHIBITION**

Coffs Harbour Civic Centre

March 31 - April 1, 1990

Saturday: 10.00am - 6.00pm Sunday: 10.00am - 4.00pm

Admission: \$ 3.00 - Adults \$1.50 - Children \$ 8.00 - Family

D59 Oil or Coal The choice is yours

Features will include:

- Etched brass cab
- Etched brass tender
- Assembled valve gear
- RP25 wheels
- Mashima can motor and idler gearbox Plus the proven superior workmanship of DJH

WIN A D59 KIT!!

The first 100 deposits will have the chance to win one of these kits absolutely free!!!

AVAILAB	LE EX	STOCK
----------------	-------	-------

C32	\$295	C30T \$345	
D50	\$295	C36 \$345	
442	\$255	D53 Conversion	POA

Planned for later this year: AD60 - Beyer-Garratt

Further details to follow.

Whilst every effort is made to maintain our stock, shortages may occur from time to time.



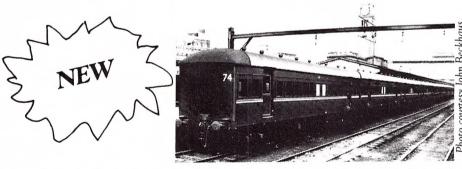
Footplate Models

PO Box 1, Higgins, ACT 2615 Telephone enquiries (06) 254 7958 Facsimile (06) 255 1481

Bankcard, Mastercard, Visa welcome

Postage and insurance extra on all products

BOB Cars



NEW 3

LLOYD'S MODEL RAILWAYS is pleased to announce production of the BOB cars, featuring ★ One-piece injected moulded body ★ Full under body detail and bogies in whitemetal ★ North yard wheels and brass bearings ★ Boxed as a four car set (2 intermediate, 2 terminal cars) ★ Additional cars available separately. See photograph AMRM News.

Expected price \$145 (Boxed 4 car set). A deposit of \$30 will secure you a set from our first run of 100 sets.

Anticipated delivery May/June 1990.

-R Cars

As mentioned in the December 1989 AMRM, tooling is well underway for production of the R series coaches later this year. These will also feature a one-piece injected moulded body as per the BOB cars. Further details to follow.

For a full listing of our white metal kits and detail parts send a self-addressed, stamped envelope.

LLOYD'S MODEL RAILWAYS

Specialising in Mail Order

PO Box 57 LATHAM ACT 2615 Phone (06) 254 7958 Fax (06) 255 1481

> Bankcard, Mastercard, Visa Card welcome

SHINOHARA

FINE SCALE MODEL RAILWAY TRACK

	TITT	CALL MODEL KAIL	WALIN	ACK	
Code 100 HO Nickel Silver	Sug. Retail.	Code 70 HO Nickel Silver	Continued	Code 70 N Gauge Nickel Silver	Continued
101 #4 Left Hand Point	14.70	333 90 Deg. Crossing	16.45	632 60 Deg. Crossing	
102 #4 Right Hand Point	14.70	340 Rail Joiners (Doz/Bag)	1.90		12.10
103 #6 Left Hand Point	16.45	342 Ins. Rail Joiners (Doz/Bag)		633 90 Deg. Crossing	12.10
104 #6 Right Hand Point			1.45	636 Left Hand Yard Point	42.85
	16.45	360 Rail Spikes (10g/Bag)	3.55	637 Right Hand Yard Point	42.85
105 #8 Left Hand Point	17.65	370 Rail Only 1000mm	2.35	650 Switch Machine	9.15
106 #8 Right Hand Point	17.65	371 #8 Left Hand Curvable Point	29.10	651 Linkage	3.55
107 #4 Wye Point	16.45	372 #8 Right Hand Curvable Point	29.10	340 Rail Joiners (Doz/Bag)	1.90
108 #6 3 Way Point	34.30	375 Space Tie	1.75	342 Insulated Rail Joiners (Doz/Bag)	1.45
109 #6 Left Hand Single Crossover	29.55	·		360 Rail Spikes	3.55
110 #6 Right Hand Single Crossover	29.55	Code 70 HOn3 Nickel Silver		ood Hair Opines	3.33
111 #4 Double Crossover	47.95	401 #4 Left Hand Point	13.75	Onde COLLO Minter Coll	_
112 #6 Double Crossover	51.30	402 #4 Right Hand Point		Code 83 HO Nickel Silver	Sug. Retail
113 #4 Double Slip	42.90		13.75	803 #6 Left Hand Point	16.45
114 #6 Double Slip		403 #6 Left Hand Point	13.75	804 #6 Right Hand Point	16.45
	44.80	404 #6 Right Hand Point	13.75	805 #8 Left Hand Point	17.65
115 Flex Track 1000mm	7.50	415 Flex Track 1000mm	7.15	806 #8 Right Hand Point	17.65
116 Single Guard Flex Track 490mm	9.00	430 30 Deg. Crossing	16.45	808 #6 3 Way Point	34.30
117 Double Guard Flex Track 1000mm	16.35	431 45 Deg. Crossing	16.45	812 #6 Double Crossover	
118 #6 Wye Point	17.80	432 60 Deg. Crossing	16.45		51.30
126 #6 Left Hand Curve Point	23.10	433 90 Deg. Crossing	16.45	814 #6 Double Slip	44.80
127 #6 Right Hand Curve	23.10	450 HO/HOn3 Dual Gauge #6 Point L-1	(1002)	815 Flex Track 1000mm	7.80
128 #8 Left Hand Curve Point	29.10	100 110/110/10 Dual Gauge #0 Follit L-1		828 #8 Left Hand Curve Point	29.10
129 #8 Right Hand Curve Point		451 HO/HOng Dual Course #C Dullet	34.35	829 #8 Right Hand Curve Point	29.10
	29.10	451 HO/HOn3 Dual Gauge #6 Point L-2		840 Rail Joiners (Doz/Bag)	1.90
130 30 Deg. Crossing	16.45	450 110 410	34.35	870 Rail Only	2.80
131 45 Deg. Crossing	16.45	452 HO/HOn3 Dual Gauge #6 Point R-1	(1011R)	890 #2.5 Wye Point	16.45
132 60 Deg. Crossing	16.45		34.35	891 #5 Left Hand Point	16.45
133 90 Deg. Crossing	16.45	453 HO/HOn3 Dual Gauge #6 Point R-2	(1001R)	892 #5 Right Hand Point	
134 Left Hand 9.5 Deg. Crossing	22.20	ů	34.35		16.45
135 Right Hand 9.5 Deg. Crossing	22.20	465 HO/HOn3 Dual Gauge Flex Track 1		893 #3 Wye Point	16.45
140 Rail Joiners (Doz/Bag)	1.90	470 Transition Track Left	10.95	894 #7 Left Hand Curved Point	29.10
142 Insulated Rail Joiners (Doz/Bag)	1.45	471 Transition Track Right		895 #7 Right Hand Curved Point	29.10
147 16" Rad Curved Track	3.75		10.95		
148 18" Rad Curved Track		340 Rail Joiners (Doz/Bag)	1.90	Code 60 HOn2½ Nickel Silver	
	3.75	342 Ins. Rail Joiners (Doz/Bag)	1.45	760 150mm Radius Left Hand Point	19.05
149 20" Rad Curved Track	3.85	360 Rail Spikes (10g/Bag)	3.55	761 150mm Radius Right Hand Point	19.05
150 22" Rad Curved Track	4.05			762 200mm Radius Left Hand Point	19.05
151 24" Rad Curved Track	4.05	Code 70 12mm Gauge Nickel Silv	/er	763 200mm Radius Right Hand Point	
152 26" Rad Curved Track	5.25	(Suitable for HOn31/2 and TT)	764 75mm Chraight Trank	19.05
153 28" Rad Curved Track	5.25	503 #6 Left Hand Point	16.45	764 75mm Straight Track	1.50
154 30" Rad Curved Track	5.70	504 #6 Right Hand Point		765 97mm Long Straight Track	1.90
155 32" Rad Curved Track	5.70	515 Flex Track 1000mm	16.45	766 150mm Long Straight Track	1.90
156 34" Rad Curved Track	5.70	STS FIEX TRACK TOUGHIM	7.20	767 150mm Radius Curve Track	2.35
157 36" Rad Curved Track		0 1 -0 0 0 111 1 1 1 1 1 1 1 1 1 1 1 1 1		768 200mm Radius Curve Track	2.35
	5.70	Code 70 Sn3 Nickel Silver		769 500mm Flex Track	4.95
160 Rail Spike (10g/Bag)	2.65	1003 #6 Left Hand Point	16.45		1.00
170 Rail Only 1000mm	2.80	1004 #6 Right Hand Point	16.45	Miscellaneous Items	
175 Space Tie (24/Bag)	1.75	1015 Flex Track 1000mm	8.25	171 X2F Coupler	0.40
		340 Rail Joiners (Doz/Bag)	1.90		2.10
Code 70 HO Nickel Silver		342 Ins. Rail Joiners (Doz/Bag)	1.45	172 Uncoupling Base	1.00
301 #4 Left Hand Point	14.35	360 Rail Spikes (10g/Bag)		174 Diaphragm	5.25
302 #4 Right Hand Point	14.35	out than opines (rog/bay)	3.55	180 Left Hand Ground Throw	6.85
303 #6 Left Hand Point	15.25	Codo 70 N Com. N. 1 1 201		181 Right Hand Ground Throw	6.85
304 #6 Right Hand Point		Code 70 N Gauge Nickel Silver		Catalogues	2.85
205 #9 Loft Hand Point	15.25	601 #4 Left Hand Point	14.65	-	
305 #8 Left Hand Point	17.35	602 #4 Right Hand Point	14.65	Code 60 N Gauge	
306 #8 Right Hand Point	17.35	603 #6 Left Hand Point	14.65	703 #6 Left Hand Point	17.05
307 #4 Wye Point	15.25	604 #6 Right Hand Point	14.65	704 #6 Right Hand Point	17.25
308 #6 3 Way Point	34.30	607 #4 Wye Point	14.65	715 Flex Track 900mm	17.25
312 #6 Double Crossover	51.30	608 #6 3 Way Point	34.35		6.55
314 #6 Double Slip	46.20	612 #6 Double Crossover		740 Rail Joiners (Doz/Bag)	1.90
315 Flex Track 1000mm	6.55		51.45	742 Insul. Rail Joiners (Doz/Bag)	1.45
317 Double Guard Flex Track 1000mm		613 #4 Double Slip	51.45	-	
326 #6 Left Hand Curved Point	12.25	614 #6 Double Slip	51.45	Code 100S Gauge	
	29.55	615 Flex Track 900mm	5.80	903 #6 Left Hand Point	22.75
327 #6 Right Hand Curved Point	29.55	626 #6 Left Hand Curve Point	22.20	904 #6 Right Hand Point	22.75
330 30 Deg. Crossing	16.45	627 #6 Right Hand Curve Point	22.20	915 Flex Track 1000mm	
331 45 Deg. Crossing	16.45	630 30 Deg. Crossing	12.10	o to the track rooding	9.00
332 60 Deg. Crossing	16.45	631 45 Deg. Crossing	12.10		
		0 0			
Berg's Hobbies, 97 Macc	nuarie Str	et Parramatta 2150		Phone (00) C	DE 0040
	7	os, i arramatta. £150		Phone (02) 63	או שוטש כנ

JUNCTION HOBBIES

Shop 33, Huntly Arcade Auburn Street Goulburn N.S.W. 2580 Postal address: PO Box 903 Goulburn NSW 2580 Phone (048) 21 8835

Trading hours:

 $\begin{array}{ccc} \text{Wednesday } 9.30 \text{ - } 5.15 & \text{Thursday } 9.30 \text{ - } 7.15 \\ \text{Friday } 9.30 \text{ - } 5.15 & \text{Saturday } 9.30 \text{ - } 3.30 \\ & \textit{Closed: } \text{Sunday, Monday, Tuesday} \end{array}$

RANGE INCLUDES:-

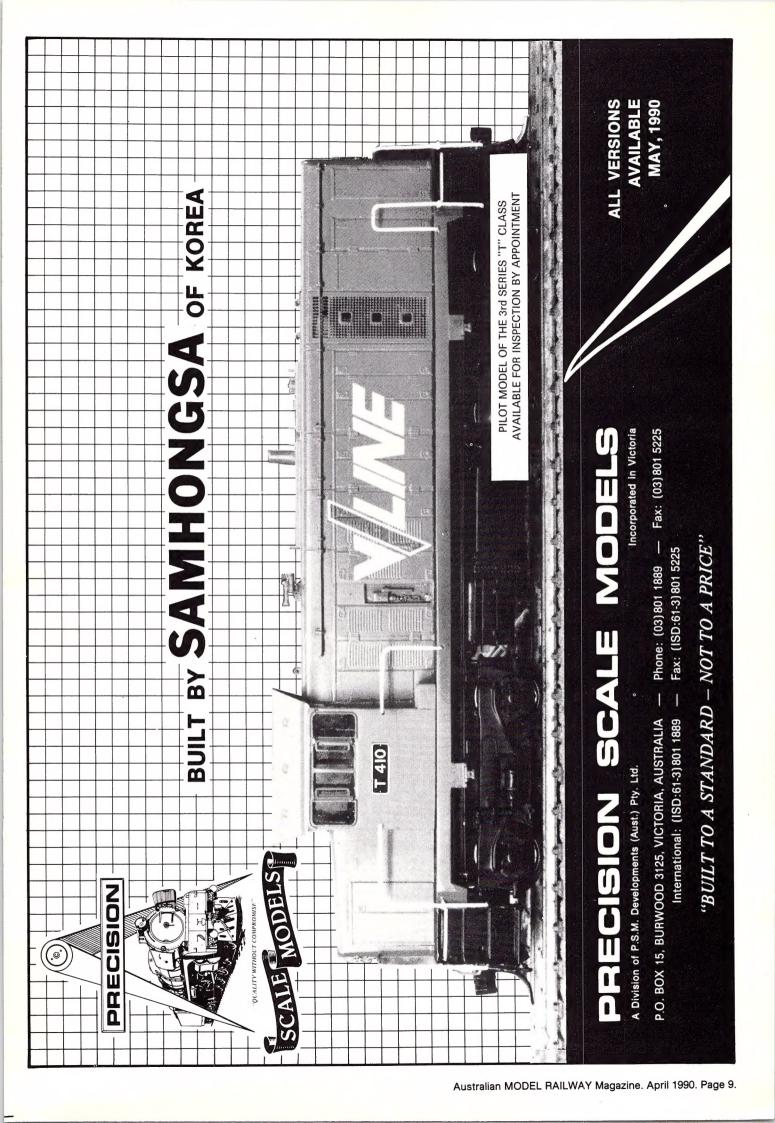
AR Kit Co., BGM, BGB, Powerline, Athearn, Roundhouse, Bev-Bel, plus videos, books scenery materials, paints, structures. HO & N scale.

SHINKANSEN

Bullet trains - Japanese traditional & modern trains -American diesels - SAGAMI Micro D/C motors HO self-driving trucks.

Catalogue listing & ordering information - \$A3.00 airpost paid.

OVERSEA SALES COMPANY INC. Takatsuku Akitsu 155-210 Kawasaki City 213 Japan



-EXPRESS

STOCKS INCLUDE

O-SCALE 7mm WAGON KITS & ACCESSORIES BY PECO, SLATERS, COOPER CRAFT & IAN KIRK.

COOPER CHAFT & IAN KIHK.

PECO track, points and accessories for O
scale, O-16.5 narrow guage, HO/OO, HOe/009
and N scales.

ROCO HO, HOe and N. European prototype
POWERLINE HO Australian prototype.
TRIX HO European Prototype

MINITRIX N European Prototype

MINITRIX N European , British and American prototype.

ATHERN HO American prototype. RIVAROSSI American prototype for N and O.

RIVAROSSI American prototype for N and O.
European prototype for O.
ROUNDHOUSE HO American prototype.
RATIO OO, DAPOL OO & SUPERQUICK OO.
MERTEN figures and animals HO/OO & N.
ROCO & RIVAROSSI 3-RAIL AC HO
EUROPEAN LOCOMOTIVES.
KADEE COUPLERS for O, HO & N.
BOGIES FOR O, HO/OO & N SCALES.

CONSTRUCTION ITEMS INCLUDE:

HO/OO locomotive and rolling stock wheels, axles, bearings, gear sets, crankpins, motors. Small BA brass screws, nuts & washers. Brass strip, rod, tube & angle. Plain & scribed plastic sheets, strips & shapes. O, HO and N scribed

plastic car siding.

Please write for up to date stock/price list of above and other items. Please advise scale/guage of lists required. If you are a beginner, special starter information data sheets are available on request.



welcome here

P.J.P. PRODUCTIONS

20 DALY STREET, GISBORNE, VICTORIA 3437 Phone (054) 282 170

-44

BAKER & COUSINS PTY, LTD.

MODEL IMPORTERS — WHOLESALE — RETAILERS

EASTER SPECIALS

BACHMAN

POLA KITS

DELTON LOCOMOTIVE WORKS

LIT PASSENGER COACHES

- Post/Baggage)

1/24th ALL METAL **FULLY DETAILED** CARS \$20 each

Bugatti SS Chev Corvette Coupe Lamborghini Jaguar E Type Peugeot 405 Porsche 944

ONLY WHILE STOCKS LAST!

Mastercard & Bankcard Welcome.

MAIL ORDERS & INQUIRIES

28 Ligar Street, Sunbury, Vic. 3429 Phone (03) 744 3536

LAYOUTS



00/H0, N or Z Gauge Pre-formed layouts

Pre-formed layout boards are made of sturdy vacuum formed plastic, and are 'ready for use complete with tunnels, ramps, hills and valleys, roadways and building areas.

N8069 P/F LAYOUT "GRAFENHEILER" 275.00 N8160 P/F LAYOUT "HALDBURG" 260.00 N8161 P/F LAYOUT "HITTENHALD" 669.95 N8162 P/F LAYOUT "ALTMUHL" 412.95 NB374 P/F LAYOUT "HOCHGRAT" 399.95 PREFORMED STAUFEN LAYOUT 347.00 N8484 PREFORMED KUFSTEIN L/OUT 257.75 LAYOUT "CORTINA" 198.00 TH8702 P/F LAYOUT "LIEBENZELL" 97.57 N9081 P/F LAYOUT "KLAUSENHOHE" 122.00 N9910 "SILVRETTA" SET N9912 EXTENSION TURNTABLE SET 258.63 N9914 EXTENSION HARBOUR SET 649.73 N9927 "ENGADIN" SET 1087.58

delivery can be arranged.

TRAIN TRADER

15 Waterloo Street, (PO Box 115) NARRABEEN. NSW. 2101.

OPEN Phone (02) 913 1362

Tuesday to Friday 10am-6pm (Thurs. 8pm) Saturday and First Sunday every month 10am-3p Salurday and in the sales of th

The Buffer Stop has everything for the Railroad Modeller

The Buffer Stop will be closed from 5.30 p.m. April 12th to reopen 9.30 a.m. April 18th for the Easter break.

The Buffer Stop has another Miller Airbrush offer, this one features a Compressor, hoses and fittings and three Airbrushes for only \$288.

Further stocks of Northern Models kits including C Class diesel, Q.R. DH Class diesel, V.R. B Wagon and Y Class diesel. Powerlines G Class we still have good supplies.

B.G.B. Model kits S.A.R. (or V.R. BK) 700 Class Passenger Cars and B.G.B. Commonwealth Railways GMX/AOMX open wagon just arrived.

New ROCO Code 83 Track system including single slips in two sizes. Kalmbachs How to do it reference books, most are in stock. Complete range of Detail Associates HO and N guage detail parts in stock. Wathers super HO, N & Z, and Large Scale Catalogue and reference manuals have arrived. Also The Buffer Stop has a good range of second hand equipment, including brass locos and coaches in stock.

The Buffer Stop has heaps of Building Kits for the Beginner and experienced Modellers such as Builders in Scale, Master Creations, Cibilo Crossing. Evergreen Scale Models, Campbells Scale Models, Classic Miniatures, Pola, Heljan, LJ Models. Kibri, Faller, Patal, Vollmer and others

Weico Models white metal HO and N gauge Cars, Trams, Buses and Locomotive kits in stock.

Good range of Narrow Gauge kits including F and G Models, Grandtline, Rio Grande Models, La belle Model Railroad General Store, Roundhouse and others

Try our import to order from Walthers catalogues as close as your phone or next visit.

Monday closed, Tues.-Thurs 9 a.m.-5.30 p.m., Friday 9 a.m.-9 p.m. and Saturday 9 a.m.-12 noon.

Try our Mail Order Service which is available on all our range, both Australian & imported. Postage at cost. All prices shown are subject to change without notice. Bankcard, Mastercard & Visa accepted. Include number, expiry date and your signature. DO NOT SEND CASH.





535 Plenty Road, Preston East, 3072. Telephone 478 0038.



SYDNEY'S FIRST **EUROPEAN MODELLERS** CONVENTION

On 19 & 20 May 1990

At Macquarie University, North Ryde.

Two days of clinics, workshops & lectures. Overseas guest speaker, slides, films, dioramas, layouts, trade displays, etc. Cost for 2 days \$25.00.

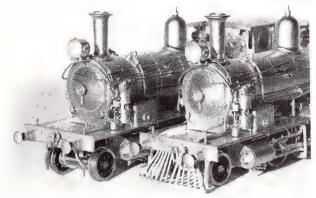
Details and registration forms from: Anton's Trains, Nth Parramatta Hobbies Unlimited, Chatswood The Model Railway Centre, Gymea Euromodel Dist., Mittagong

Postal enquiries:

P.O. Box 236 Castle Hill, 2154.

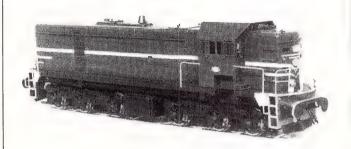
CLASSIC BRASS MODELS

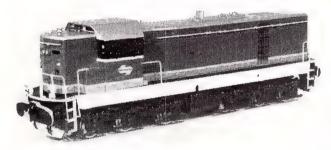
LIMITED QUANTITIES



Z24 by Yulim, Korea

Now available - \$ 730.00 each (see review last issue)





49 Class by Samhongsa, Korea

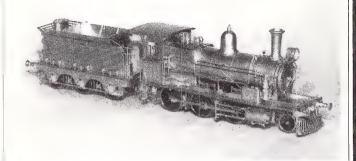
Now available - factory painted models (see review last issue):

Painted Models - \$835.00 each

Unpainted - \$ 793.00 each

Limited number only - Ring for availability.

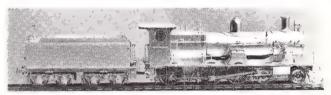
Models are available from:-



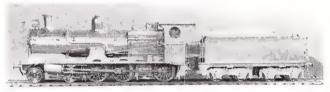
Z25 by Yulim, Korea

Now available - \$ 730.00 A & B units \$ 765.00 for C,D,E,F units (Pilot model illustrated)

Refer to advertisement in December AMRM for full description of variations produced.



Original Classic C32 illustrated



NSWGR C32 Steam Locomotive

Two versions: Curved Footplate, Angled Footplate

Premium quality model by Samhongsa NOW AVAILABLE - \$ 795.00 each

"Subject to price variations due to exchange rate and sales tax"

Deposit - \$ 50.00 with order Laybys Taken

Sorry no credit card on pre-paid price

Note: "No variations to price on pre-paid units"

CASULA HOBBIES

P.O. Box 72, LIVERPOOL. 2170. Phone (02) 602 8640 245 Northumberland Street, LIVERPOOL. 2170. FAX (02) 602 8874

Call in and see the full range of Classic Brass Models on display.

Price subject to change without notice.

Large range of new and second hand brass for sale at all times.

ADVERTISING INDEX

	AMRM - 25 year Index	4
	- Back Issues	4
	AR Kit Co. ARE Video	75 81
	ARHS NSW Sales	4
	America-N Models	78
	Australian Hobby Centres	72, 73 2
	Australian Locomotive Co. Australian Model Craft	74, 80
	Baker & Cousins	10
	Berg's Hobbies	74
	Berg's Hobbies - Shinohara Track Bill Webb Model Railways	8 5
	Box Car Hobbies	84
	Broad Gauge Bodies	64
	Broad Gauge Models	67
	Buffer Stop CIL Distributors	10 10
	Casula Hobbies	79
	Classic Brass Models	11
	Colour Art	64
	Euromodel Distributors Exhibitions - Ballarat	63 64
	- Coffs Harbour	6
	- Figtree	76
	- Meadowbank - Sutherland	68 70
	Fiddleyard Model Services	64
	Five Star Models	82
	Footplate Models	7
	Hobbies Plus Hobby Shop Directory	68 86, 87
	Horizon Hobbies	76, 84
	J & D Distributors	71
	J & J Hobbies	64
	Junction Hobbies Krystall Castings	8 76
	LJ Models	80
	Lloyd's Model Railways	7
	Market Place Mitronics	70 64
	N-Trains	6
	Overseas Sales Co.	8
	PJP Productions	10
	Platform One Port Transport Books & Models	80 68
	Powerline Models - Catalogue	41 - 48
	Powerline Models	66
	Precision Scale Models	9 76
	Preston Hobby Modelle Punchbowl Hobby Centre	83
	Rail Video	84
	Rail'N'Thusiast	68
	Southern Models - Lima Station House	3 82
	The Big Train	82
	The Signal Box Model Railways	85
	The Turntable	64
	Toyman Imports Train Trader	69 10
	Traintasia	77
I	Woodpecker Models	78

DIARY

EXHIBITIONS

WERRIBEE - Victoria. March 23, 24, 25, 1990 at Centenary Hall, Watton St, Werribee. Open 4pm-9pm (Fri.), 10am- 9pm (Sat.), 10am-6pm (Sun.). Admission: \$3. Details - (03) 480 4177)

COFFS HARBOUR - NSW. March 31 and April 1, 1990 at Coffs Harbour Civic Centre. Open 10am-

6pm (Sat.), 10am-4pm (Sun.). Admission \$3\\$1.50\\$8. Details - (066) 42 2168.

SUTHERLAND - NSW. The Great Little Train Show', April 21 and 22, 1990. Open 11am-8pm (Sat.), 10am-5pm (Sun.) Admission \$3/\$1.50/\$8. Organised by the Sydney N Scale Model Railway

SEVEN HILLS - NSW. April 28 and 29 1990 at the Seven Hills High School Assembly Hall, Johnson Avenue, Seven Hills. Open 10am-5pm. Admission \$2.50/\$1/\$6. Organised by Western Districts Modellers Group. Details (02) 624 8865

FORTITUDE VALLEY - Queensland. May 5, 6 and 7, 1990 at the Horticultural Pavilion, RNA Exhibition Grounds, Alexandria Street, Fortitude Valley, Open 9am-6pm (Sat.), 10am-6pm (Sun.) and 9am-6pm (Mon.) Admission \$3/\$1. Organised by The Australian Model Railway Association, Queensland

TAMWORTH - NSW. May 12 and 13 1990 at Tamworth Town Hall. Organised by the Tamworth Challenge Foundation

WOLLONGONG - NSW. May 12 and 13, 1990 at Figtree High School, Gibson Road, Figtree. Open 10am-5pm (Sat. & Sun). Admission \$3/\$2/\$5. Organised by the Illawarra N Gauge Model Railway Club. Details (042) 84 6677 or (042) 71 6221

TOOWOOMBA - Queensland. June 2 and 3, 1990 at the Police Citizens Youth Centre, James St, Toowoomba. Open 2pm-9pm (Sat.), 8.30am-5pm (Sun.). Admission \$2.50/\$1/\$5.50. Organised by the Darling Downs Model Railway Club. Details AH (076) 35 8776

TAREE - NSW. June 9, 10 and 11, 1990 at the Taree District Police Citizens Youth Club, Commerce Street, Taree. Organised by the Taree and District Model Railway Club.

MEADOWBANK - N.S.W. June 9, 10, 11 1990 at Meadowbank College of TAFE, Rhodes St., Meadowbank. Admission: \$3/\$1/\$8. Organized by the Epping Model Railway Club Inc. **BALLARAT - Victoria.** June 9, 10, 11 1990 at

Ranger Barracks Drill Hall, Curtis Street. Open 10am-9pm (Sat.), 10am- 5pm (Mon.). Admission \$3/\$1/\$8. Organised by the Ballarat & District Model Railway Club Inc.

DIARY continues on page 62.



There is little doubt the a high level of detail in scenery adds dimension to a model railway. This is illustrated in the scene above - the timber mill at Bellbird on Steve Cullen's NOn21/2 layout. Turn to page 33 for the story of the railway and more photographs.

TRADE PRACTICES ACT 1974

The above act is now in force and contains strict regulation on advertising.

It is not possible for this company to ensure that advertisements which are published in this magazine comply with the Act and the responsibility must therefore be on the person, company or advertising agency submitting the advertisement for publication. In case of doubt, consult your lawyers.

SCR Publications.

AMRM CREW

Editor Allan Brown

Editor - Special Publications ian Dunn Typist Nicki Verdich Ian Thorpe Illustrator Production Assistants Max Burke, Ross Hurley Trevor Moore Distribution John Casey Back Issues Computer Programmer Graham Davis Commercial Liaison Officer Graham Ahern

REGULAR CONTRIBUTORS

Editorial Assistant (NSW) **Paul Rogers** Editorial Assistant (Vic) Phil Jeffery Editorial Assistant (Tas) Michael Dix Editorial Assistant (Qld) Max Chaseling Phil Curnow Editorial Assistant (SA) Editorial Assistant (ANR) Hugh Williams

Special Projects Writers
Phill Collins
Phillip Dunn, David Bennett, Es Davies
Peter Eisenhut, Bob Merchant, Stuart Liversey
Ian Weickhardt, Jim Leppitt, Graeme Pantlin
Draughtsmen
Roger Johnson, David Taylor

Peter Zaglauer, Adrian Compton
Ray Love, Howard Armstrong, Tony Parnell
Graeme Brown, Steve McElroy, Roger Porter
Sam Hyde, Pete Mustard
tistic Advisors
Bob Reid, Steve Liebelt Artistic Advisors Cartoonist Dick Stein

Managing Editor Bob Ğallagher

S.C.M.R.A. PUBLICATIONS COMMITTEE John Bevan, Allan Brown, Fred Gooch lan Dunn, Trevor Moore, Bob Gallagher

AT ISSN 0045-009X

The official Journal of the Southern Cross Model

Railway Association (SCMRA) in Australia.

Published bi-monthly by SCR Publications of Box 4
P.O., Little Bay 2036 for the Southern Cross Model Railway Association. All rights reserved and all editorial matter copyright.

Registered for posting as a publication - Category B. Printed by Diamond Press, 118 Bourke Road, Alexandria, 2015. Most compilation, editorial and distribution work is carried out by voluntary labour on a non-profit basis.

DISTRIBUTION: Subscriptions, SCMRA members, hobby shops and Associations by SCR Publications; newsagencies and bookstalls by Gordon & Gotch Limited

CONTRIBUTIONS in the form of articles, photographs, hints, Letters to the Editor, drawings or trade press releases are welcome for publication in this magazine. All items received will be acknowledged upon receipt. Please pack photographs and diagrams between stout cardboard before posting. Indicate whether photographs are to be returned and

of trimming is forbidden.

SUBSCRIPTIONS: Rate (by surface mail) \$27.00

per year (6 issues); overseas \$A34.50 per year.

Subscriptions are limited to one year duration. All monies payable to SCR Publications at Little Bay, NSW. Subscription starts with the first available issue after receipt of order. Receipt of subscription is not activate and unless resulted and appears. is not acknowledged unless requested and accompanied by an SSAE.

if trimming is forbidden

ADVERTISING: Details available from SCR Publications, Box 4 P.O., LITTLE BAY, NSW 2036. Phone (02) 661 4046 (To 8.30pm). FAX (02) 661

ADVERTISING DEADLINES: For all copy is as follows: June 1990

August 1990 October 1990 December 1990 15.6.90 17.8.90 12.10.90 February 1991 April 1991 15.2.91

This publication accepts no responsibility for the accuracy or reliability of articles or advertising contained herein, statements made or opinions expressed in papers or discussions, nor do we necessarily subscribe to the views expressed or implied by contributors. Neither is any guarantee implied or expressed as to the good conduct or practice of advertisers herein. This publication reserves at all times the right to refuse acceptance of any matter considered unsatisfactory for publication.

The Australian MODEL RAILWAY Magazine is published by SCR Publications, P.O. Box 4, Little Bay, NSW 2036. Please address all correspondence to the Editor.

Australian MODEL RAILWAY

COMMENT

by Ron Cunningham

The End of the Age of Brass?

The release of AR Kits' 45 class, I believe, is the beginning of a new era for modellers of NSW prototype (and perhaps eventually for followers of other states too).

Why do I say this? Well, I regard this model as a quantum leap forward in the production of Australian outline, ready to run, plastic locomotives which, will transform the modelling habits of the hobby if followed by further models of the same standard.

True, there have been other highly accurate, well detailed plastic diesels produced in the past, some of which have had more finely detailed moulding work (the Powerline 81, BL and G come readily to mind). However, where the 45 class radically departs from previous models is in the areas of running abilityand standards.

Clearly, through the use of a can motor, an improved drive mechanism, 12 wheel pick-up and the use of standards akin to RP25, AR Kits has sought to achieve a model comparable to Kato in finish and performance. Kato models, of course, are much envied by modellers for their superior running qualities. Gone for instance are the European type deep flanges, poor pick-up and Hong Kong Ringfield type motors.

Yes, there are some problems with the 45 class. In most respects it does not quite achieve the Kato standard and it does require some adjustments to reach its full potential. However, this should not be allowed to detract from the fact that this is an exceptionally good model.

More importantly AR Kits' obvious aim of producing models of Kato levels of performance and standards places them on a different plane to previous models. With the minor improvements that could be expected in future models (and I hope there are many more), I believe that AR Kits has the potential to dominate not only the intermediate level of the hobby but also to become a serious contender for that segment of the market which currently purchases brass for its usual (but not always) superior running qualities.

The possibility of equipping a model railway with a fleet of relatively inexpensive, high quality plastic locos of our favorite classes, each with running qualities of the highest order has, I believe, the potential to radically alter the purchasing patterns of the hobby.

This is certainly the way the hobby has progressed in the US where plastic diesels are the back-bone of the hobby and most operating layouts are dominated by such models.

The end of the age of brass? Probably not as there will always be a demand for brass models. But the final arrival in Australia of high performance, quality plastic ready-to-run locos will certainly spell the end of the dominance of brass. I can hardly wait.

ON THE COVER

The best known tourist or preserved railway in Australia is without doubt Puffing Billy located in the Dandenongs, a short drive from the city of Melbourne. One of the many spectacular locations on this railway is the Horseshoe Trestle over Monbulk Creek, which the diminutive trains have to negotiate shortly after leaving Belgrave. Ian Thorpe is the photographer who caught 7A at the head of a Sunday morning train in March 1989.

CONTENTS

APRIL 1990

Issue 161 Vol.14 No.8

14	PAGE FOURTEEN
14	Steve Cullen's VR HOn21/2 models

15 SLOPE SHEETS FOR THE BCH
Detailing the inside of a coal hopper with Phil Curnow

16 Improving the Tractive Effort of a C32 Class
Terry Flynn

17 MORE ON TIMBER MILLS
Lindsay Collins provides more information for the detailer.

17 QR Pre-World War I Trains
Peter Kelly

18 UNDER LIVE WIRES - Pantographs lan Weickhardt describes prototype pantographs.

23 1990 CORIO EXHIBITION
A report from Ron Richardson.

9.3 VALE - Dane Parker

24 UPDATING BERG'S D50 CLASS
Bill Roach details another loco updating.

26 ROAD VEHICLES for MODEL RAILWAYS - 4 Kitbashing a Sydney bus with Max Chaseling.

27 ANOTHER EARTHQUAKE
An interesting communication process.

28 MAILBAG
Correspondence from readers.

32 AMRM NEWS Information for interested modellers.

33 BELLBIRD Steve Cullen's HOn2½ VR layout.

40 PREVIEWS Latest releases - in brief.

49 TAKE OUTS and PICK UPS South Australian light goods traffic with Phil Curnow.

50 BRANCHLINE RAMBLINGS
Detailing and Modellers with Ron Cunningham.

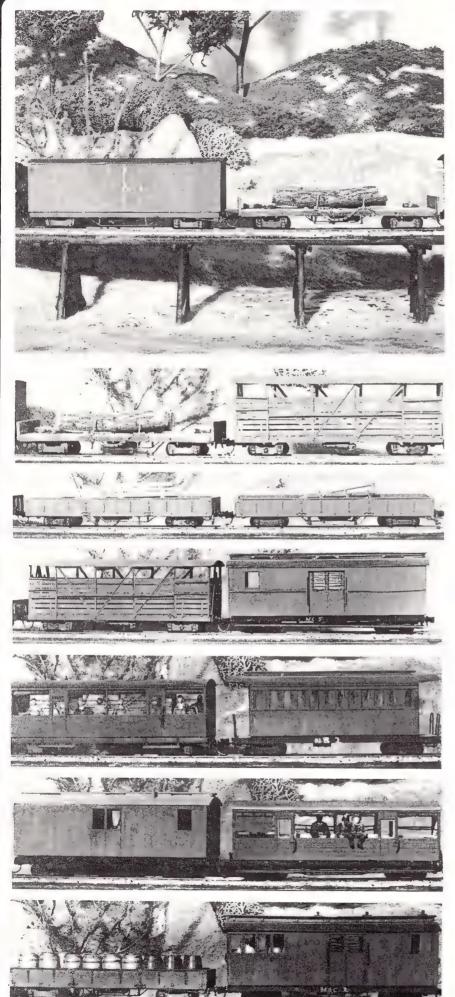
51 BRITISH COLONIAL YANKEE Frank Kelly models the VR Class S 4-6-0 loco.

54 LINESIDE James McInerney.

55 TUNING THE AR 45
Fine tuning this popular HO model.

57 REVIEWS Covering the latest releases.

Relax With Model Railways



PAGE FOURTEEN

Rollingstock of the Bellbird Railway

Steve Cullen's Bellbird Railway is featured on page 33 of this issue. Based on the Victorian Railway 2'6" gauge system, Steve has use scratchbuilding and kits to stock his colourful layout.

The photographs on this page include a few of his models, further details of which can be found on page 37.

The models were photographed by Bob Gallagher on the timber trestle that negotiates the waters of Lake Reeve. In the scene to the left, the insulated NT van, is attached to the log carrying NQ wagon.

Below left is the NQ Log wagon and NM cattle wagon.



Scratchbuilt louvre van NU.

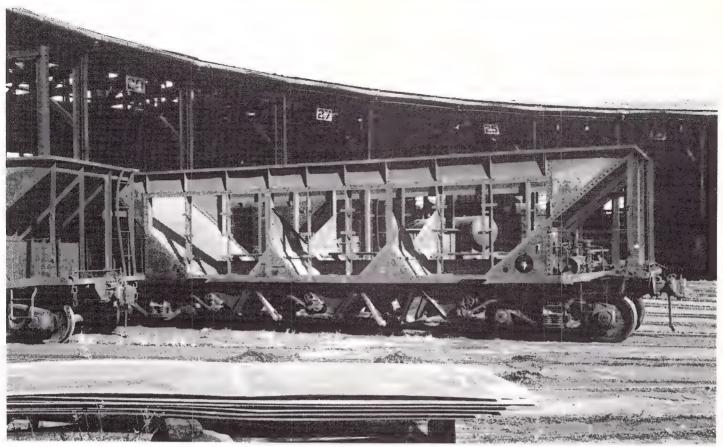
NQR open wagons loaded with farm implements.

Cattle wagon NM coupled to NC 5 van.

Open tourist coach on NB2 end loading saloon.

NBC open tourist coach complete with passengers and van.

NQR loaded with barrels and NBC 2 brake van.



A BCH hopper under repair at Enfield, April 1972. Looking at this closely you can see that the slope sheets guide the coal toward the hopper doors and that the centre beam is much higher than the side sill.

SLOPE SHEETS FOR THE BCH

Phil Curnow adds interior detail to the AR plastic kit.

When AR Kits released their plastic kit of the BCH coal hopper they answered many requests for an accurate NSW coal hopper. I had great plans to scrap my converted Athearn and Bachmann Yankee four door models which only looked 'close enough'. Plans changed when I found that the new kit had a flat floor with rough depressions inside the doors. It lacked the slope sheets which guide the coal towards the doors. This meant that the model was either intended to always be full or be covered as on the wheat hopper version.

After a lot of delays, I made a plastic insert which was then moulded in resin by a patient friend. The result is fragile and not easily released from the mould but eventually I had enough. An insert intended for commercial

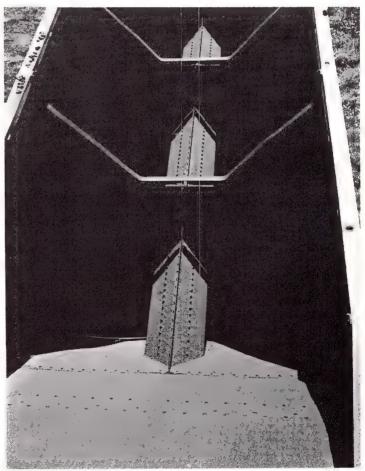
release would need considerable improvement on my effort.

Looking down into a BCH coal hopper you quickly realise that there are no level surfaces to block the coal and stop it slip- sliding away. The sloped sections are tight-fitted to the sides and lead smoothly to the door openings. The angle of slope is quite important because if it is too shallow the load can pack down with vibration and then not release when the doors are opened. The approximate slope for the BCH can be seen by the rivet lines on the side.

I built my master from 0.020" plastic sheet, taking special care to get a tight fit with the end sheets of the model. This soon proved to have been a waste of time. The width of the model appears fairly constant but the length varies a little, depending on how well you match the floor and ends. My advice is to make the insert a little wider and longer than you think you will need and then trim it to fit. To reduce the amount of plastic you need to remove from the floor, you may choose to widen the central slope sheets. I based mine on photos and the kit rather than try to make an accurate

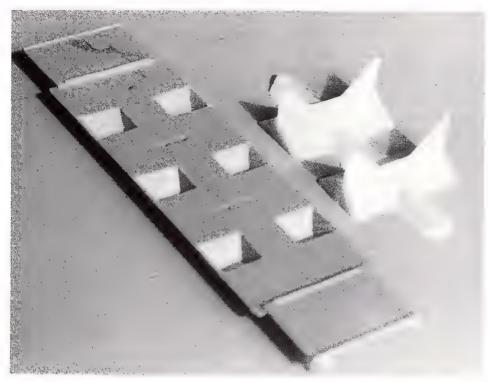
model and therefore avoided a lot more work.

Fitting the cast insert needs to be considered for either an unassembled kit or one that you have already built and want to improve. The unmade kit has a few advantages for access with a scraper, so let's start here. I assemble the floor, one side and two ends with MEK, using the other side as a dry fit to align the rest while they dry. From stocks of gutter solder (see your hardware store), I shape two pieces that are fitted into the triangular spaces over the bogies to give a good operating weight. When dry, I start the scratching and scraping of the floor by trimming along the joint between the floor and the side. I fill the gaps between the end slope sheets and the floor and smooth them also. Now I trim the insert ends and sides for the best fit and prepare to glue it to the floor. Because of the variations I have noted, I now break the insert at the centre and place each end separately to leave the least plastic to be scraped away. It's easier to fill the gap in the centre. Now carefully scrape with a sharp blade and enlarge the depres-

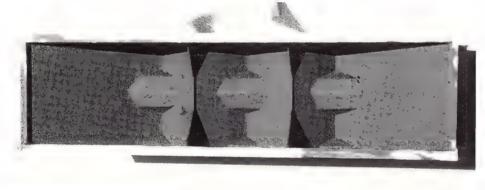


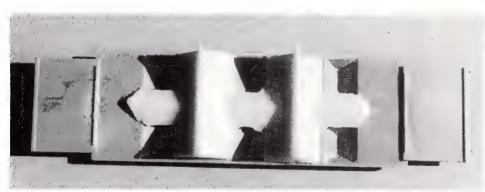
The inside of an BCH coal hopper.

Australian MODEL RAILWAY Magazine. April 1990. Page 15.



The floor as supplied in the kit with rough casting alongside.





sions in the floor to get the best appearance you can. Small scalpel style blades are best for getting into awkward corners and you may even be tempted to reshape some with a Dremel cutting disc, but protect your eyes.

I began this project using Humbrol plastic filler, changed to Tamiya, which is favoured by military modellers, but still couldn't hide the joint between plastic and Plastibond. Scrape it and you may still get a ragged edge. Eventually, I tried gap filling Superglue and found it worked a treat. You will find that a glue supplied in a plastic bottle and with a thin tube will be easiest to use because tube glues often squirt too much. I've used ZAP and Hot Stuff with success. The glue doesn't run like water as do the fast setting types. Being thicker, but not creamy, it is still drawn into the hole where it dries hard and bonds to both plastic and Plastibond. You can apply several drops if you wish, but make sure that the first is dry before adding a second layer. When hard, it can be scraped or sanded for a neat joint, but remember to work in a ventilated room as the fumes won't do you a power of good.

Last step is to MEK the second side in place and gap fill the edge after scraping if required. A coat of paint and it will look as good as Athearn. Sounds easy, doesn't it? Good job to do while you're listening to Test cricket, or even watching it.

If you decide to fit an insert to an assembled model, you will need to solve the weight problem yourself. We tried putting lead shot in the resin mix but couldn't make the weight distribute evenly or get a smooth instead of lumpy surface. Good luck.

After you have scraped along both joints of the sides and floor and then filled and smoothed the joint with the slope sheet, you are once again ready for the insert. You will find it harder to get the right angle with the end sheets and will probably knock the two internal stiffeners off one side to get the *@** insert to fit inside the model. I glued them back after the insert was settled into place

A commercial model would best be supplied with these stiffeners as a separate item. This would allow a smaller package with less risk of damage. Moulded in plastic would be ideal, resin or epoxy would be acceptable, while white metal would solve the weight problem but may prove more difficult to scrape and smooth.

Well, there you have it, a BCH that looks reasonably complete when run empty. To put a temporary load in it requires a slab of balsa with model coal glued into mounds on it.

Centre Left: Looking down into a model with the cast insert glued into place and the joints filed and smoothed. Trust the camera to show up the errors.

Left: The raw mould insert laid on the floor to show how much was scraped away before I began breaking the insert then patching it.

IMPROVING THE TRACTIVE EFFORT OF A NSW 32 CLASS BRASS LOCOMOTIVE

Terry Flynn

I wanted to run scale length trains with my 32 class on my layout and found it just missed out. An analysis of why some models pulled more than others led me to consider some basic theory

There are only two factors that significantly affect tractive effort on our model locomotives - the weight on the driving wheels and the coefficient of friction. I did not attempt to change the stainless steel driving wheels, as they look great and work well. Instead, I concentrated on increasing the weight on the driving wheels. The first thing I did was to remove the spring that pushes on the leading bogie. The model becomes front heavy, so pieces of lead sheet were glued inside the driver's and fireman's seats. To do this, the cab interior is removed by undoing the two screws holding the cab steps on, then gently pulling the cab interior out. A very thin sheet of lead was also glued inside the roof of the cab. Extra weight can also be glued under the motor. I used a superglue to secure the lead sheets.

The model now is about 20g heavier.

To see if the modifications made any significant difference, I made up a test train using a combination of Powerline and Lima passenger carriages. All the carriages have metal wheels to the NMRA RP25 standard. Body mounted couplings were fitted. An unmodified 32 class was borrowed from a friend. On a 1 in 80 grade around a 914mm radius curve, it managed five carriages. The modified 32 class hauled seven carriages under the same test conditions. Lighter carriages under the same test conditions. carriages under the same test conditions. Lighter carriages were added to each train in turn to get a more accurate maximum train load. The final difference between the tractive efforts of the two locomotives was 27%, making the modifications very worthwhile

I have improved other models using the same basic ideas, and I am pleased with the results.

MORE ON TIMBER MILLS

Lindsay Collins

I read with interest Roger Kershaw's article on the sawmill in the April 1989 issue of AMRM.

As a user of timber over many years (chasing up quarter sawn and riven stuff), I have had to visit many mills - old, new, bush mills and some modern steel-framed ones.

The early mills were similar but different. As they cleared the site for the mill, a lot of the timber was used in the round to build a shelter over the boiler first, then a roof over the saws, and later on sides may have been added to keep the weather off the workers in the mill.

Offices, and often workers' huts, were built from split palings and shingle roofs, the latter replaced with corrugated iron after the mill had been operating for many years.

Sometimes the original roof over the boiler and mill was shingles, but corrugated iron was preferred as sparks from the always wood-fired boilers could not set the roof alight.

The owners never supplied housing for their employees, as many mills were set up with the intention of only being in operation for a few years, then moved to be closer to the log sup-

plies. The later use of motor trucks to bring logs to the mills meant they could operate much longer in the one location.

At first the workers, and sometimes the families, lived in tents, often with bark and paling additions. Later the married men built, in their spare(?) time, huts of split or round timber, sheeted with palings and shingles. Again, these huts were the same but different(!), each bloke having his own ideas and capabilities as a builder.

The area around a mill was always cleared as timber was felled either to build the boiler house and sawmill, or to be benched into saleable timber. All the offcuts, small branches and logs, dry bark and so on, went to feed the boiler.

Later the workers felled a lot of the lighter trees to build their huts.

So, if you are building a mill on your layout, there are no definite dimensions; even the size of the boiler and saws varied.

There were 'one saw' mills. That is, the breaking down bench only had one circular saw, set below the bench. Others were 'two saw' mills, with a double saw set up at the breaking down bench.

Once the logs were broken down to quarters or halves, or squared up (depending on size), the baulks went on to the No.1 bench to be sawn into the largest sizes for the trade, the offcuts and smaller sizes going to the No.2 bench where the timber was sawn into 2", 3", 4", 5" or 6" x 1", 1 1/2" or 2".

Before being stacked, a lot of the lengths went over the docking bench where ends were

squared, rotten or other unsaleable parts cut out, then cut to lengths being multiples of one foot.

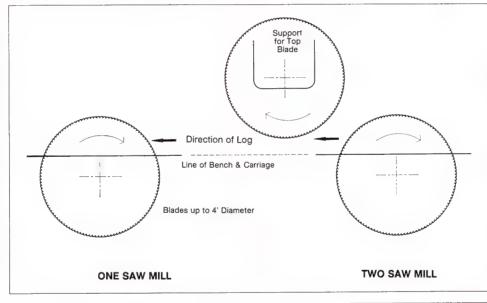
In the yard the timber was stacked by size and lengths, or it may be loaded directly onto trucks (road or rail) to go to city timber merchants

Australian mills were always Timber Mills but in USA or Canada they were either Lumber Mills which cut timber sizes for framing or bridges, etc., or Board Mills which mainly cut redwood into wide planks. Just keep this in mind if you are putting a name to your mill. But then you can be quite correct, wherever your mill is sited, with just a . . . Sawmill.

Early era mills would have stacks of split palings for fences and the splitters worked in the bush. Logs were brought in by horse or bullock team, or, in really mountainous country, by use of a 'king' tree and a system of cables and pulleys and flying foxes. The modern era use dozers, tractors for close haulage of logs, or motor trucks and timber jinkers for long distance

Then all the sawn timber can go off on the rail, either as a 'pack' (all one size stacked and strapped, loaded and unloaded by crane), or as a random load (various sized timbers and lengths loaded into the rail trucks by hand), although this is a very rare sight today.

Rail trucks used solely for timber cartage are either flats or opens, but all have large steel ends, to prevent timber spearing into the next truck or lineside object.



QUEENSLAND RAILWAYS PRE-WORLD WAR I TRAIN

Peter Kelly

In 1876 until the early 1900s the QR had a Fairlie Double Tank engine, un-numbered and painted black.

In the early 1900s QR also had two VB vans. They were bogie guards vans fitted with a Vj coal hopper.

In 1914 there arrived the first of five McKeen cars (Victoria had some McKeen cars also).

In 1980 I decided to model these narrow gauge masterpieces and to exhibit them at model shows.

I was glad that the Fairlie was not around to be compared to two Hornby 0-4-0 (one unpowered) joined back-to-back.

At least I painted them black and did not number my masterpiece.

The VB van was made from an old Airfix coal

hopper and a small shed I had in my spare parts box, mounted on a Hornby/Triang bolster wagon, cut to length of the hopper and guards section.

An idler truck was made from a Triang four wheel open wagon without its body. (The body became mounted on a brick base to serve as a small coal bin.)

The McKeen car took a bit longer to model. In order not to show up the other Queensland modellers, I decided to model the McKeen car in the crate as it came out by boat from America. The crate is 60' long, 10' wide and 12' high. (No metrics muddles pre-World War I.)

I glued matchsticks onto balsa and, to give the impression of the crate being full, I put a 4oz lead strip inside. This is most effective, as friends can testify, when I handed them what they thought was an empty box. (You could see them think . . . has he really made a McKeen car? before they realised I was having them on.

I used rub-on lettering and glued four ladders to the crate before applying a coat of clear varnish all over.

Finally I tied the crate to a Triang/Hornby bolster wagon and coupled up my vintage trains

Of course the purists will know that QR is not 4'8 1/2" gauge or 4mm scale, but do they know that the VB was 2' (cane train) gauge?

Ah, the joys of narrow gauge, anything that could run ran.

Who else but Peter Kelly would!

UNDER LIVE WIRES PANTOGRAPHS

Ian Weickhardt continues his series on modelling overhead wiring. This article details the construction of pantographs for a model railway.

The construction of a pantograph is a particularly satisfying modelling activity. Certainly it is time consuming and fiddly, but there is much pleasure in watching your own pantograph skimming along under live wires.

There are several basic types of pantograph. They include the 'pentagon', probably the most common in the world; the 'crossedleg', which is really a pentagon cunningly arranged to fit in a shorter roof space, as on Sydney double-deck motors; and the 'halfpentagon', of which the Faiveley is a common type.

In Victoria, the first pantographs were the crossed-leg type (Diagram 45) supplied by General Electric (GE) of the USA. These were the only type used for the 20 years up to the late 1930s. At that time, the VR became interested in the pentagon type which was the staple commodity on Sydney electric trains. The VR bought a number of Metropolitan Vickers pentagons (Diagram 39) of a simpler design than the Sydney pentagons, and fitted them to trains for evaluation. The 'Metrovicks' were then introduced to the whole fleet, although to the very end of timber-bodied stock there were

Photo 39: This purpose-built structure at Burnley originally served two tracks. Note how the weight of the two booms is taken by the diagonal tie rod guyed back to the top of the fabricated tower.

still some units with GE pantographs.

In Sydney, the 1950s vintage 46 class mainline electrics appeared with Metrovicks step forward! But, at the same time, the VR L class mainline electrics appeared, with an English Electric pantograph that looked like the first Sydney units. A step which way?! And then Sydney's double deck cars came equipped with a crossed-leg unit which is also worn by the latest NSW electric locos. And these days, in Victoria and Queensland, there are a growing number of 'half-pentagons'. Victorian modellers have been given a lot of latitude by the VR's swapping of pantographs over various rollingstock. For example, both Metrovicks (and their Japanese-made equivalents) and Faiveleys have appeared on 'Red Rattlers', Harris 'Blues' and Hitachi 'Silvers'.

We hope that, in fully describing the construction of the Victorian pentagon and crossed-legged types, we give enough ideas for everyone to build the type that relates to their chosen system.

Principles

This explanation of pantograph principles is based on the simplest type, the 'pentagon' type, shown in Diagram 39. It consists of a frame (H), two axles (B), four 'legs' (A), an 'equaliser' mechanism (G), the four upper frame members (C), the diagonal braces (E), and the current-collecting bow (D) or, as it is sometimes called, the 'pan'.

The rising of the legs causes the whole assembly to rise, opening out as it goes. Prototype pantographs are raised by compressedair piston assemblies transmitting push through springs. Model pantographs are raised by a spring or springs. In both prototype and model, the push is applied via cranks attached to the axles.

The equaliser mechanism exists to ensure that the axles rotate in equal amounts while the pantograph is moving up or down. Look at Diagram 40. Imagine a movement in the direction of arrow 1, and then follow the other numbered arrows indicating the consequent movements of the other parts of the mechanism. It will be seen that both sides of the pantograph work together, as the movements are co-ordinated by the action of the equaliser bar working via its associated cranks.

The curved-down ends of the bows are the 'horns'. The horns are thus shaped so that the wires mounting the bow will do so smoothly, even if they are lower than the centre of the bow.

When you look at other types of pantograph, such as the 'crossed-leg' type and the Faiveley type, you will find corresponding parts of the mechanisms doing the same kind of jobs. The Brecknell-Willis 'universal' or high-speed types used on Melbourne's Comeng 'Silvers' have most of their 'works' inside the square tubes, so they are harder to figure out. They also look fiendishly difficult to model successfully! Anyone like to take up the challenge?

Modelling Pantographs — Some Important Points

One of the most important things for modellers to grasp is the need for exactness in certain key aspects of construction. It will be success in this area that gives you pantographs that can rise, without internally binding, to full height, and with the bow parallel to the vehicle roof. They will also drop easily down to the 'fully stowed' position. If legs are of slightly unequal length, or the axles are not square to the frame and parallel with each other — the pantograph will bind at some point in its operation. If you try to overcome this with strong springs, the resultant pressure on the contact wire will push it excessively upward, and the bow horns will snag on incoming wires.

So, when you commence construction of pantographs, take steps to ensure that you build them right. These steps consist mainly of the manufacture of jigs upon which to check the precision of your work. These are described as we go. Make and use them; the time involved will prove to be an investment.

Be sure also to use heavy enough sections for those parts identified as needing to be such. For example, the frame must be of a comparatively thick section, or else the axle holes will wear oval in a distressingly short time. That is the voice of experience.

Construction of a VR 'Pentagon'

Refer to Diagrams 41 to 44. Firstly, make up the jigs shown in Diagrams 42 and 44.

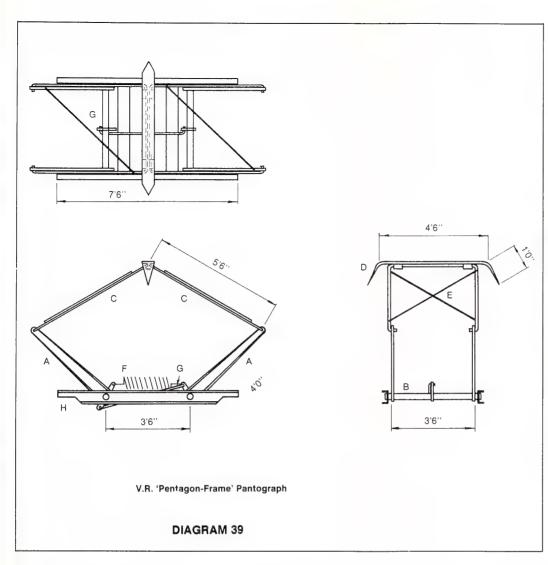
Jig A has the following functions:

- Work block for holding in a vice.
- Ensuring total interchangability of all pantographs made on that block. The screws are at the exact centres of the four mounting 'insulators' in our case, press studs. Make sure that the centres are at the extremities of the frame ends, or the legs will foul the press studs when the pantograph is lowered.
- Maintenance bed for repairs.
 Jig B has the following functions:
- 'Go/No-go' test bed for the four legs.
- Forming and checking bed for the two upper arm sets.

Commence construction with the frame sides. Make them either from pieces of brass rail with one side filed down flat, or from thick strips of brass; in O scale, use 16 SWG material, 4 or 5mm wide. Solder the two sides back-to-back and then drill the two axle holes to suit the axle diameter. Separate the frame sides

Use silver-steel rod for the axles. In O scale, 1.5mm is the reasonable minimum diameter. Each axle is to be a little longer than you estimate that it needs to be. The excess length is filed off later.

Put Jig A in a vice, or otherwise solidly secure it. Snap four press-stud females onto the males. Tin the relevant underside areas of the frame sides and sit one in position on the jig. CAREFULLY solder it in place. Sit the other frame side on on its press-studs and, whilst



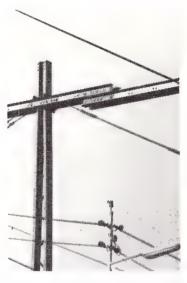


Photo 40: Did the VR borrow this idea from a modeller? A short-cut adaptation made at Burnley when the Richmond to Burnley stretch was four-tracked.

holding it there, slide the two axles into position. Adjust the frame side position until the axles are square to the frame. The simplest way to establish a reference for squareness is to rule lines on the jig block, at right-angles to the frame sides. You then 'sight' past the axles to see if they are parallel to the lines. Solder the second frame side to its studs.

Cut the two frame cross-members from 20 SWG brass, about 3mm wide, and solder them into position as shown in Diagram 41. Leave a gap of 2mm between each cross-member and the axle next to it. This leaves room for the

equaliser and spring cranks fitted later.

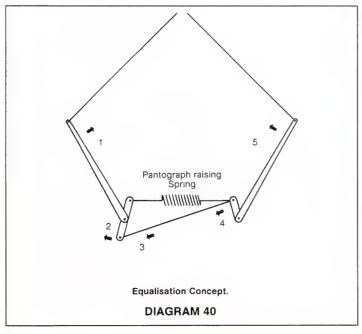
Make up the four legs (Diagram 43). If they are to be 'girder' (flanged) section, make them from pieces of brass rail suitably doctored. Otherwise, make them from thick brass (1.5mm in O scale). The hole drilled in the axle end should be a sliding fit for the wire used for the upper arm sets. In O scale, 20 SWG hard brass wire is a good typical size. In my first pantograph, though, I used steel wire that I had unravelled from stranded clothes-line wire. NO, my mother's clothes-line did not collapse.

Make up a leg, and test it on the relevant

two pins on Jig B. Be ruthless — if it doesn't fit, discard it. (Don't throw it out; you might use it as a 'pattern' for three others like it, by clamping it to three other pieces and drilling through. If you do this, though, you will have to 'fiddle' the upper arm lengths to get the pantograph geometry right.)

Once you have a 'good' leg, use it as a pattern for three more, as described. Test all on the jig.

Make up the equaliser crank and spring crank out of thick brass — no less than 20 SWG.



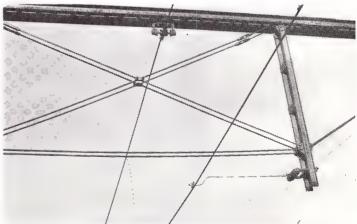
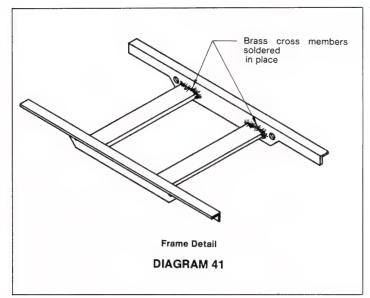
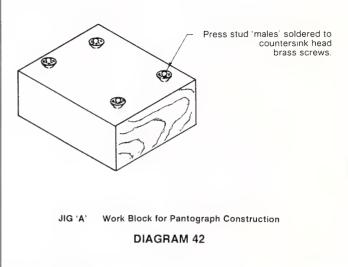
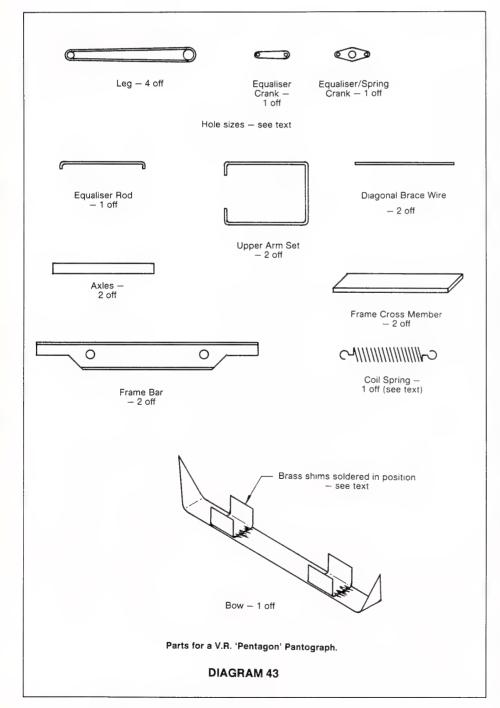


Photo 41: Close-up of bracings and fittings on a multi-track structure at Burnley.

Previous articles in this series include:-	
Under Live Wires - 1	June 1988
Under Live Wires - 2	December 1988
Under Live Wires – 3	April 1989







Remove the axles and thread the legs and cranks on. Solder ONE leg in position on each axle. Now thread pieces of hard brass wire through the holes in each pair of legs. Carefully chock the two legs of one end so that they sit with the wire parallel to the jig block, and then solder the free leg in position. Repeat at the other end of the pantograph.

Make up the two upper arm sets from the relevant size of wire, as discussed above. Test them on Jig B, discarding if they don't fit. Slide them into position on the legs. Let the pantograph drop flat, and inspect the lie of the upper arm sets. They should be laying with their tops parallel and either just touching or less than 1mm from each other. Any greater separation, and the finished pantograph won't drop to the fully stowed position. If they are overlapping each other, again the pantograph won't stow properly. If this happens, re-work the jig, and make new upper arm sets until you get it right.

Make the two diagonal brace wires, and solder into place on the upper arm sets.

Make the bow from a piece of phosphor bronze strip. Make it a bit longer than scale, rather than any shorter. A little extra length makes it more tolerant of inaccurately placed contact wire, especially on curves and at points and crossings. Phosphor bronze has good wearing qualities, so that is why it is used on commercially-made model pantographs. After I wore grooves in one of my O scale brass bows, I changed to phosphor bronze.

Cut two strips of shim brass, each 2mm wide, and about 20mm long. These are to be formed so that they attach the bow to the two upper-arm sets. Start by laying an upper arm set over the underside of the bow, symmetrically placed, so that the horns are equally spaced from the respective 'sides' of the upper-arm set. Scribe the upper-arm position onto the bow. Lay one of the shims on the bow, against one of the scribed lines, and with one end overlapping the edge of the bow by 4mm. Solder it in this position. Repeat this with the other shim. Nip off the 'long' ends so that 4mm ends are left. Bend the shim ends up as shown in Diagram 43. Now sit the bow over the upper-arm sets, and with a small pair of pliers carefully bend the ends over the upper-arm sets. Make sure that the upper-arm sets continue to lie side-by-side rather than 'overlapping' each other.

Now raise the pantograph to its full height, i.e. as far up as it will go. It will want to flop backward or forward, because it awaits the equalising linkage. With the pantograph chocked up to full height, and sitting symmetrically, carefully solder the equaliser cranks in position in the centre of their respective axles. The 'right position' is as shown in Diagram 39.

Page 20. Australian MODEL RAILWAY Magazine. April 1990.

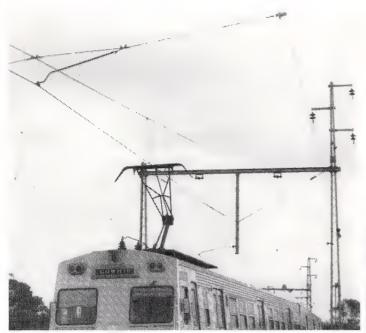


Photo 42: A Faiveley pantograph reaching for the sky at the Poplar Avenue level crossing, Royal Park.

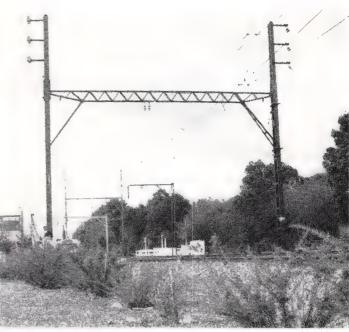


Photo 43: Typical 'wider than two-track' HT-carrying portal at Blackburn.

Now measure the distance between the holes in the equaliser cranks and use this to fashion an equaliser rod (Diagram 43) from the same kind of wire you used for the upper arm sets. Fit the equaliser rod. Remove the chock, and test the operation of the pantograph. If it leans, either make another equaliser rod or gently melt the solder at one crank and correct the pantograph stance.

The Spring

Use a spring about 2mm in diameter and made of very thin wire. Such springs are found in old calculating machines and other small machines. They can also be bought commercially. They are often longer than you want; merely nip off the excess and form a new end. If the wire is tough, soften the end a little by heating it over a match. Now hook it into place. It should raise the pantograph convincingly, but not force the contact wire up too far. You may need to experiment with springs to get this right, but it is not hard to do.

Mounting the Pantograph on the Vehicle

MAKE SURE THAT THE PANTOGRAPH POSITION IS CENTRED OVER THE KING PIN OF THE RELEVANT BOGIE. This ensures correct tracking around curves. (Some American vehicles had their pantograph halfway along their roof; I suspect that they had long bows to compensate for the excessive offsets this would have caused on curves.) Make sure also, by turning the vehicle around and replacing it on the track, that the pantograph position is definitely central with respect to a contact wire set up centrally over the track. Now snap the completed pantograph off the jig, and prepare to set up the appropriate studs and fittings on the roof of the relevant loco or motor coach.

(a) For wood, plastic, or other non-conducting roof material:

Drill four holes and insert screws at the same centres as those on the jig block. Solder the relevant snap fittings to the screwheads, and snap the pantograph into place.

(b) For metal roofed vehicles:

Obtain four small metal thread round head brass screws and eight nuts. For O scale, 6BA or the nearest metric size will do. Now find some plastic or other insulating tubing into which the screws are an easy sliding fit or a loose fit. Find or make eight thin insulating washers with a hole just big enough for the

screws you selected.

Drill four holes in the vehicle roof, large enough to slide a piece of the insulating tube into. Cut four pieces of tube to a length equal to the thickness of the roof, and glue these into the four holes. Glue insulating washers above and below the roof at each hole. Spin a nut onto each screw, right down to the head. Insert the screws into the holes, from above the roof, and spin on the lower nuts. If you need to, because of height restrictions, you can omit the upper nuts.

Now check from each screw to the metal roof with a multimeter set to an Ohms range, to check that each screw is really insulated from the roof. Solder the dress snaps to the heads of the screws, and snap the pantograph back into place. Now check from pantograph frame to roof again with the multimeter, just in case there's a short to the roof.

Raise and lower the pantograph a few times, and check that none of the spring or equaliser cranks are touching the roof as they move. If they do touch, they cause a mysteri-

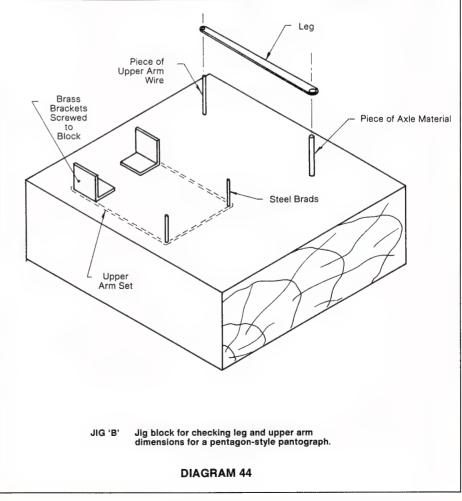




Photo 44: This H-beam boom provides a giraffe-style reach for steady-arm support, at Spencer Street. Looks more like the way a modeller would do it.

ous intermittent binding and possibly short-circuits onto metal roofs.

Painting

Most pantographs are painted. Paint yours accordingly, but keep the paint away from the joints.

Connecting up the Juice

Run an insulated wire from the motor up through the roof and solder the end to some suitable point on the frame.

The construction of a VR 'Crossed Leg' pantograph continued next issue.



Photo 45: Some of the very few single-upright towers used by VR for double track. The closeness of the sidings at the left precluded the placing of uprights on that side. These are between Macaulay and North Melbourne.



Photo 46: These lower than usual portals support the catenary as it rises from under the Wellington Parade South bridge, towards the Jolimont-MCG station.

THE 1990 CORIO EXHIBITION

Ron Richardson

all of the day. The rain didn't dampen Latrobe Valley

Australia Day weekend and, while our athletes continued to do us proud in New Zealand, the annual pilgrimage to Geelong was made for their Model Railway Exhibition. Arranged by the Corio Model Railway Club, all who attend are assured of an enjoyable couple of hours, viewing a variety of Australian and overseas prototype layouts along with some excellent scratch and kitbuilt modelling displays.

This weekend is usually hot and, for 1990, the forecast is for much of the same but, as luck would have it, the actual day was a mild 26 degrees and the long drive was quite pleasant with reasonably light traffic, unlike my trip to Morwell when it rained almost As expected, the Transit Police PR bus was in

Club's effort and neither does the heat affect Corio.

attendance and a goodly flow of people was viewing its display of old photographs of Victorian Railways. V/Line also had on display some of their large scale models of locomotives. These are built to a scale of about 1" to the foot and always attract attention.

Those who are regular readers of this magazine will remember the sad news in the June issue regarding the four friends from the Corio Club who were tragically killed on 13 March 1989. Well, the parents of one of those killed, Phil Hayward, have kindly donated a trophy in memory of Phil. This takes the form of a perpetual trophy for the best layout at the annual model railway exhibition. I personally think that this year's show was the best I've seen and perhaps the spirit of those who died was lingering somewhere in the wings giving encouragement.

AMRA was in attendance with their Kyneton layout in HO. This layout is handlaid code 83 rail and, as usual, was running very well. However, I found the mixture of eras a bit distracting. An R class steam loco hauling freight being crossed by an N class diesel on an N-set? Come on, fellas, you wouldn't allow it at Camberwell!

Latrobe Valley Model Railway Association Inc - this is a 2.4m x 4.2m freelance layout with various scenes making it suitable for running rollingstock of British, American, as well as Australian. But not at the same

Bayside Model Railway Club had on display their HOn3 layout which is based loosely on the Victorian narrow gauge practice. It measures 2.1m x 2.1m and is ideal for one operator. Most of the locos and rollingstock can be seen in real life at Puffing Billy at Belgrave

Frank Sheeran had a display of old Hornby Tinplate in O gauge and showed what model railways were like during the 1920s and 1930s. Most of the guys operating the layout were members of the Hornby Collectors Association.

Blue Lake Model Railway Club from Mt Gambier in South Australia started to build their layout three years ago. It doesn't represent any specific location, being designed to cater for the varied interests of the members. While viewing the layout, the members were operating Australian broad and standard gauge rollingstock with the Australian National and the old South Australian Railways being very much in evidence. At different times they also operate American and British prototype

Laurie Green had his fabulous HOn3 Rio Grande Southern layout on display. This layout is meant to depict something of that 162 miles of improbable railroading in the State of Colorado where men were men and railroading was plain hard work. The layout depicts three well known parts of this scene - Ophir Loop, the Butterfly Trestle and Rico Yard. The rather stark scenery befits the type of country where mining has removed most of the timber for pit props and mineheads, etc., as well as for the railroad itself

A talk with Barry Pianta of the Bendigo Model Railway Club revealed that their 8.1m x 2.7m layout was built by members and features three main running tracks with a large shunting area. They operate mostly Australian prototype and have a capacity for running long trains. An interesting feature was the trees which were made from the yarrow bush which is found in the Bendigo area.

The last layout to be described is Clinchfield. This layout was a Model Railroader project layout some years ago for N scale and is as popular today as it ever was. It has been around for some time and has been to many exhibitions. It has undergone some quite extensive rebuilding for this show. The prototype is part of the giant CSX operation in the USA. It's a mountain railroad with coal as its main means of revenue earning and it also offers a direct link into Florida. Six trains can be seen operating and are all models of prototype trains.

Five trade stands were present, including Train World, Box Car Hobbies, Finescale Hobbies, Precision Scale Models and BGM. Precision Scale Models had on display the pilot model of the low nose T class in V/Line paint scheme, T407 - very impressive. Box Car Hobbies, in conjunction with Baker and Cousins, had a display of G gauge. Broad Gauge Models displayed HO models as produced by them and last, but by no means least, Finescale Models had their N class diesel on display, as well as 16 different train sets and a range of accessories for Australian prototype.

The modelling standard of the Corio Club is of a very high calibre and the models in this year's competition were no exception. The competition is open to scratchbuilders, kitbashers and kitbuilders, with classes for locos, goods wagons, passenger cars and structures, and they also have a class for junior

Locomotive - Prize donated by Tempest Electronics.

- A. Fitzgerald Australian National DL class.
- A. Brown Great Western 2021 class tank loco.
- P. MacDonald S class rebuild based on S 302.

Passenger Car - Prize donated by F&G Products.

- P. MacDonald BCE1 in HO scale. P. MacDonald ABW 32.
- A. Curtis Z van.

Freight Car - Prize donated by F&G Products.

- G. Hince BP tank car.
- A. Curtis VR workers' sleeping van HDW440.
- G. Hince water gin.

Structure

- P. MacDonald mainline shop kit.
- G. Hince water tank.
- P. MacDonald narrow gauge car shed.

The Perpetual Trophy for the best model went to Peter MacDonald for his model of BCE 1 (described in the February 1990 issue - Editor). Nathan MacDonald took out the prize for the best junior modeller.

Any report on a model railway show would not be complete without a mention of that dedicated band of scratchbuilders and kitbashers that are willing to give of their time and expertise to demonstrate the techniques of building models of rollingstock and structures that depict our local scene. Corio is no exception. Several of the members were hard at work building anything from a brass and steel 1/12 scale signal frame by Tony Kociuba, to the building of models of Victorian prototype by Allan Curtis, Cameron Milne, Peter and Nathan MacDonald and Gavin Hince.

Missed at this year's show was PJP Productions, of Gisborne. We hear that Phil has not been well and hope he is soon back on deck.

The Phil Hayward Perpetual Trophy was won by the Blue Lake Model Railway Club and the most popular layout, as far as the public vote was concerned, was Laurie Green's Rio Grande Southern.

Well, that's it for another year. Something that I find very good at exhibitions such as Corio is the sense of mateship. Anything that makes friendship the way model railways does has to be good. If you go to a show, don't leave your wallet at home as most exhibitions have a second hand stall and it's a poor man who doesn't pick up a bargain.

VALE

DANE PARKER

December 31, 1989 Aged 32

It is with deep regret that we report the most sudden and unexpected death of Dane Parker.

Dane passed away on the afternoon of 31 December 1989 and at the time of writing the cause of death is still unknown.

He was born in Christchurch, New Zealand on 6 May 1957 and came to Australia with his family as a youngster in 1971 where they initially settled in Sydney before Dane's father's employment took the family to Brisbane.

Dane entered Brisbane University in 1975 where he studied to become a dental surgeon. These studies were completed in 1979. During his final years of study he joined the RAAF as an undergraduate and then went on to serve until 1985. He returned to university at Sydney and completed a master's degree in forensic dentistry. At the completion of his term of service with the Air Force he entered private practice with his wife in the Springwood area of the Blue Mountains.

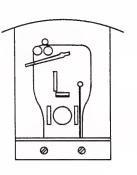
Dane's involvement with model railways dates back to 1974 after purchasing a copy of Model Railroader from the local newsagent. He went on to join the Brisbane N Scale group and began developing his modelling skills. During his time in the Air Force he was moved from base to base and this caused his modelling activities to take a back seat for the moment; however, prior to his discharge, he joined the Sydney N Scale Model Railway Club and was a very active participant in all of that club's projects.

The early years in the Brisbane group had fired an enthusiasm for the N Trak system of modular operation and he undertook the informal position of Sydney area co-ordinator. His works in this role are now starting to bear fruit, with many modules either completed or under construction. During the latter part of 1988, he and others promoted 'N in '89', the first N Scale convention to be held here in Australia.

Following the period after his leaving the Air Force, he, like other N scalers, was suffering from the lack of detail parts that seemed so plentiful to the older and more established scales and, rather than just complain, he went and established his own import and mail order business, America-N, specialising in the N Scale American prototype.

It can only be guessed at what the future might have held for this innovative thinker and doer and what his future contributions to the hobby might have been.

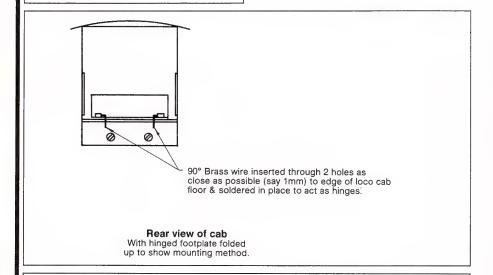
Dane is survived by his wife Roza and their two daughters Emma and Charlotte.

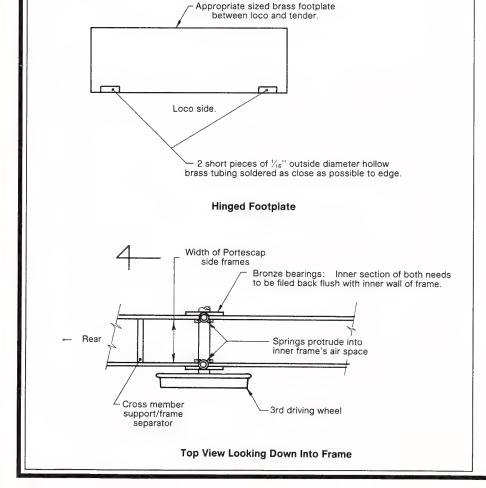


Basic cab detail to be added.

UPDATING BERG'S D50 CLASS

Bill Roach describes another locomotive updating conversion. The subject is the Berg's HO scale D50 standard Goods engine.





At the time of its release, the Berg's NSWR D50 class HO scale model was highly regarded as an accurate, state-of-the-art piece of workmanship.

Recent developments and releases have shown the detail on the Berg's unit to be somewhat lacking and the drive train leaves a lot to be desired.

For this task I chose to replace the motor and worm gear arrangement with a 3mm axled version of the Portescap RG4 motor and gear head. Not only would this provide a replacement for the current system (on which the nylon gear was beginning to show severe signs of wear), but the smaller motor would sit neatly in the firebox and make it possible to add back-head detail and a cab floor.

I removed the body from the chassis as well as the motor. The rods, cylinders/slides and wheel sets were removed, taking care not to lose the eight springs from the axle journals. The uninsulated (fireman's side) driving wheel was removed from the axle holding the nylon gear, which was also removed. This task was accomplished using an axle/gear puller I made myself using a 100mm high door hinge and three ¼" (or 6mm) bolts and nuts. I have included a diagram of this puller in the article. North West Short Line (NWSL) also make a reasonably priced puller.

One thing which became apparent before I removed the wheels/journals from the chassis, was the fact that the Portescap unit would only just fit between the frames once the outer edges of its brass bearings were filed back flush with the side of the gear head. These brass bearings only protruded very slightly, but nevertheless needed to be trimmed. Also it was immediately obvious that the bronze journals would have to be filed on their inner edges so as to be the same thickness as the mainframe members. Likewise, the two springs which supported the journals on this particular axle would not be able to be reinstalled as they too used some air space between the frames.

It was decided to solder the bronze axle journals to their keeper plate, thus negating the need for the springs. On most brass models, especially the earlier ones, the axle journals' support springs served no real use anyway, and therefore their omission would not cause any running problems. Prior to soldering the journals in place to the keeper plate, the rectangular hole in it has to be widened by filing so the lower part of the Portescap will fit between. The actual soldering of the journals was done with keeper plate in situ on the chassis and a screwdriver inserted where the spring used to fit to provide the pressure to ensure the journal ended up in the correct position.

The other three driving axles were then re-

installed and the keeper plate placed in position. The third axle was then threaded through all the necessary parts and the grub screw on the gear was tightened. Cylinders/slides and rods were then placed back into position and the unit tested. It is always nice to breathe a sigh of relief when a task such as this has been undertaken and found to be successful! Polarity was checked to ensure the loco would run in the same direction as other locos and wires were soldered into place to complete the motor changeover. The boiler weight had to be moved forward so it would not protrude rearward past the section of cut-out boiler where the gearhead would sit. The boiler itself did not require any modification except for the drilling of a suitable hole about 12mm forward of the original weight mounting screw.

Photographs of D50 class locos were then studied and various oil lines and steam lines were added using fuse wire kept in place with drops of ACC superglue smeared at the necessary locations. There is no point of me going into too much detail in this regard; the photos in various books and magazines are in-

valuable for this purpose.

A cab floor was made up out of 0.010" shim brass and glued into position. After some trial and error, a firebox backhead was also made up to the same profile as the existing fitting and several pieces of detail were made and glued into position. Items such as rocking levers, firehole door, water glass, regulator, gauges etc. were all added from bits of scrap and pins, staples etc.

If you wish to be more accurate, you can probably buy proper castings for such a purpose, but my belief is that things that are hidden away in the cab cannot be easily seen and only need to be vaguely recognisable.

A footplate was then added by cutting a suitably sized piece of brass shim which would bridge the gap between loco and tender when they are coupled. The four edges were filed slightly to remove the sharp edges and on the section that rested on the cab floor, two short (about 2mm) pieces of 1/16" outside diameter round brass tubing were soldered to form the hinging ability. These two pieces need to be as close as possible to the edge and facing across the cab. Find some brass wire or similar narrow enough to fit the inside of the brass tube and cut two pieces about 4mm long and bend them both at 90 degrees at their centre. Drill two holes through the cab floor as close as possible to the edge of it, sized so that they will accept the wire you chose. These holes need to be drilled so they match up with the points where the two pieces of tubing end. The wire can then be inserted into the two pieces of tubing and, in turn, the right angle part of the wire can be fed down through the holes and be soldered from underneath. The footplate should pass through a 180 degree arc and of course rest easily on the tender footplate.

Note: The standard turret tender supplied with this model needs to have a full sized footplate added and I used a thin piece of Plastruct to do this, which both raised the footplate height so the hinged plate would sit on the level and also provided an insulated base to prevent short circuits.

The tender also had some other perceived deficiencies which I set about correcting. The most obvious of these was the bogies, which appeared to me to be from a goods van (they looked like Bettendorf units or similar). I ordered a pair of bogies from Footplate Models,

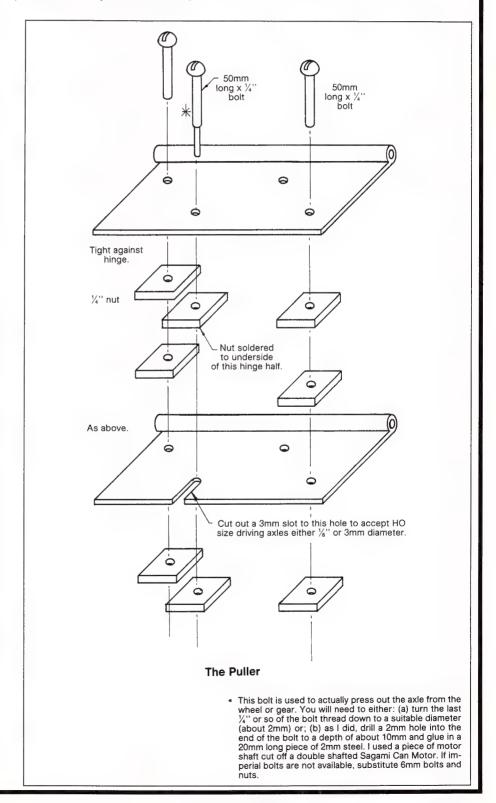
which firm produces an excellent representation of the correct bogie in kit form. These were made up and, after removing the original bolsters from under the tender, were found to only require the addition of a thin washer to bring the unit back up to the correct height.

The tail lights were noted as not having any conduits to them, so these were formed from brass wire and glued into position.

Turning attention back to the footplate again, it was decided to add a handbrake wheel (left over from, again, a Footplate Models Standard Turret Tender kit I had purchased several years before: they were kind enough to pro-

vide a spare). This was mounted onto a piece of brass wire and soldered into position; a small hole was then drilled through the new plastic/brass footplate and the brass wire was glued into place. A couple more pieces of brass wire were bent at right angles and cut to length and added to represent the injector handle and deck hose etc. Fire irons were carried along the side of the turret and two or three of these can be knocked up and glued into place.

I hope if you attempt these modifications you get as much enjoyment as I did.



ROAD VEHICLES for MODEL RAILWAYS

Part 4

Max Chaseling describes a few N scale vehicles and a brief 4mm scale Sydney bus kitbash

By the time you read this you will be aware that we propose to assemble a register of model road vehicles applicable to the Australian model railway scene. It is hoped that this will facilitate the selection of vehicles for the era of your layout. Hopefully, the information specifics will include scale, make, type, kit or finished, supplier and availability. It is hoped that any special knowledge will be passed on for all to share.

We did promise to discuss N scale road vehicles and with the help of a small scale friend, I have sighted some Fords of the mid-30s. These are one-piece soft metal castings by Detail Associates and the detail is more than fair. I saw a

series of three with a van, ute (pick-up if you dress to the right) and a coupe. Painting them may be fun (?) but I would like to see number plates and rego labels fitted.

The same friend showed us some later model Fords (mid-50s) by Quality Craft Models. These are in four-piece kits consisting of a front, a back and a pair of wheel/axle sets. The latter are more like a flat head nail with a head on both ends. The realism presented is less than fair; still they represent an era so park them in a garage with the bonnet showing or hide them behind a bush.

It is disappointing to see superb model railways spoilt by minor detail. Most of this minor detail is scale oriented and not a function of skill or workmanship. I refer typically to sheep larger than motor cars, cattle bigger than trucks and small trees with one metre diameter trunks. My plea is for merciless scrutiny of all scenery items and if it does not look right, throw it away or put it on your brag shelf and thereby help some others to have the courage also. If it looks right, have some kind friend photograph it. Then you can fix it. Cameras cannot develop psychological myopia.

At the top end of readymade detail in N scale, there are some superb Toyota Crown sedans by Kato. If we consider Wiking as the standard for model motor vehicles, these by Kato are at least

In the lower half of this range of standards is most of the N scale Bachmann vehicles. I have seen a Chev stake side tray from the mid-50s which is very good and whilst others are not very which is very good and whilst others are not very recognisable, they provide a basis for kitbashing and they are not very expensive. The Pantech vans are fair so dare to be different and modify/mix and match some prime movers. This marketing organisation also has a line of motor cars, some good, some not so. Be perceptive and organise a wrecking yard for the doubtfuls, but again - do it carefully.

Recently I was asked by a friend to 'have a go' at a Merit 00 scale Maudslay bus kit. He is biased for he models NSW steam and diesel in HO scale. A half-cab 20s single decker is foreign in this environment but I recalled a photograph in 'Truck and Bus' under the heading 'Years Ago'. It showed a Sydney government bus of the 1930s and it appeared to be built on a truck chassis as was the custom. I made a fair scale drawing from the photo which may be suitable for you to model. Unfortunately, the magazine has been lost, but if someone can turn up the reference, I would be most obliged. I feel the chassis could be White, Brockway, Fargo or REO. Incidentally, did you know REO is from R.E. Olds, the father of Oldsmobile?

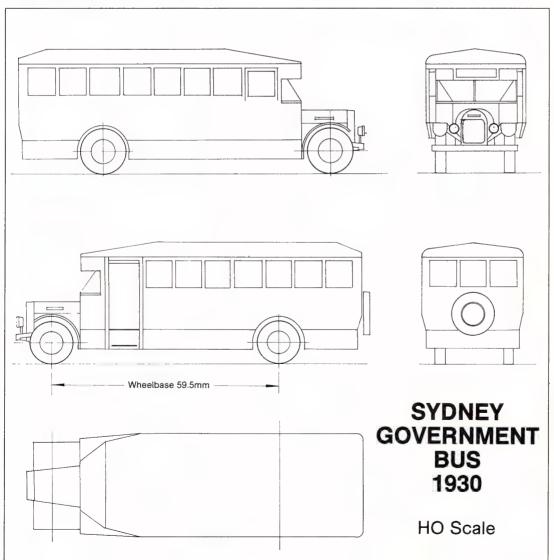
Back to the model and I calculated (or more truthfully hoped) that the Maudslay could be a conventional bonnet something or other with a front door so that my friend would have a believable vintage bus for his empire. Checks with scale rule revealed very little scratching would be necessary as most parts could be cut, spliced and rearranged to suit. Most of the work was to the nearside moulding and related to moving the rear door forward. Horizontal bars were fitted to the front bulkhead to simulate period windscreens and the right side moulding was trimmed back to

The right side of the bonnet was built from scrap in the kit and the only things missing are the louvres on this part. The roof was cut back and fitted with a fascia. The spare wheel was rear mounted vertically as was the custom.

It was found convenient to paint progressively with the assembly using Tamiya paints (it is so con-



N scale Fords, Detail Associates - unpainted.



Page 26. Australian MODEL RAILWAY Magazine. April 1990.

venient to wash brushes with water).

There were no difficulties building the model except for the material itself. Whilst this kit is moulded in polystyrene, it is very brittle and requires great care in handling. This is most unusual and so also is its bright green colour; perhaps the two are connected.

The final article you may judge but it does look big beside the Weico Austin three tonner and this

is another modelling reality.

If we wanted to use this 4mm scale bus on a 3.5mm (HO scale) diorama, three options are available:

- Forget the problem.
- 2. Hide it.

3. Do something to disquise its relative size.

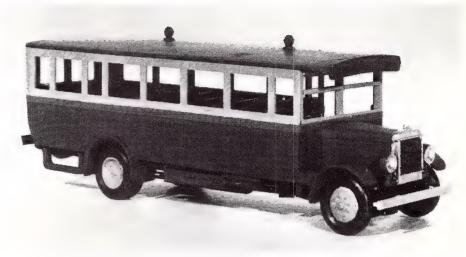
Objects smaller than scale are disguised by placing them in the distance with surroundings similarly reduced. This is commonly called forced perspective and it may be interesting to plough into this can of worms sometime in the future.

The opposite case is not quite so simple. It is still necessary to surround the overscale object with similarly scaled things including people. The illusion can be enhanced by placing all this around large objects such as mountains, bridges, factories and trees. It helps if out-of-scale things, such as scale trains, are kept away to prevent scale comparison. If you choose to hide your 4mm scale vehicle in a mass of people (which can be successful) make sure you use 4mm scale figures.

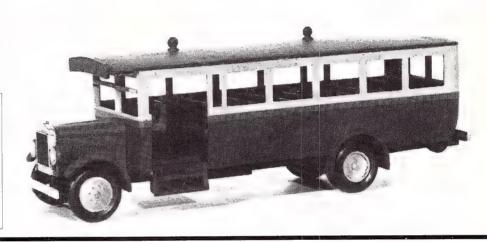
ADVERTISING DEADLINE

June 1990 Issue Advertising deadline is:-April 20, 1990.

The June 1990 issue should be available at the normal outlets by May 22, 1990.

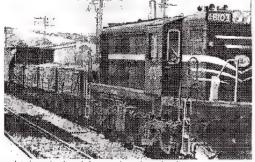


Maudslay bus, Merit 4mm kitbash.



The Maitland HERALD

SECOND EARTHQUAKE STRIKES THE UPPER HUNTER REGION



A goods train passing through the area prior to the earthquake

Photo by K.G.Bowen

At 1.00pm on 21 January, the sleepy town of Bylong was the centre of an earthquake of force 6 on the Richter Scale. In a massive uplift, the town was lifted approximately 14.5 metres and moved northwards another 106 metres. There was little structural damage to the local buildings and it is felt that the whole area shifted in one large mass.

The nearby Cox's Gap loop area was the most heavily damaged when the railway line slipped to the valley floor. The Cox's Gap signal box was not effected. A spokesman for the New South Government Railways stated that it is unlikely that the loop will be rebuilt and the signal box will be shifted to another site.

The Commissioner of the New South Wales Government Railways, stated today that the railway line will require rebuilding to accomodate the change in grades, however this will be treated with the highest priority. Trains are expected to be running as far as the township of Bylong, within 3 months.



GIBSONS
REMOVALS
The reliable ones
VIP Care—
Economy Pates
ANYWHERE
Local and Interstate
Hunter Valley Based
FREE Quotes. Phone
(049) 61-1253

ANOTHER EARTHQUAKE?

Ron Cunningham

No, its not an April fool joke. In fact, it is Ray Pilgrim's way of telling us that major changes have taken place on 'Bylong'* which is Ray's Hunter Valley based model railway.

Valley based model railway.

Ray, as well as being a railway modeller of long standing, also has a keen interest in computers. A combination of a scanner, Newcastle newspapers and some desk top publishing software enabled him to produce the accompanying facsimile of a newspaper front-page.

This was handed to participants as they arrived at one of our regular Friday-night get togethers at the Pilgrim household. As we read the handout it became clear to us that there had been major changes to Bylong which had been kept secret from all present.

Thus, once we were all assembled we made our way quickly to the railway room where, as the article points out, major changes had indeed taken place.

Considerable discussion followed on such diverse topics as grades, yard layouts, scenery, signalling and the one hundred and one things that go to making up a model railway and which now would have to be changed on Bylong.

Much work needs to be done but it will not be that long before the trains are running again and the debris and the confusion in evidence at the moment are just dim memories.

Fortunately, we will have the accompanying article to remind us of the momentous upheavals which took place that January afternoon.

Long time visitors to the annual AMRA exhibition may remember seeing Bylong as a top quality, award winning exhibition model railway. Much of the exhibition railway was incorporated into Ray's home layout but I suspect that after one major re- location, plus the events described here, there may not be all that much of the original exhibition model railway left.

Bylong has also featured on several occasions in AMRM.

Re G. Mascord: I'm a beginner as well and have the privilege of having an electrician for a father. For this reason, most electrical problems can be carefully explained so if you could send details of your problems I could provide answers. In relation to the telly problem, I had the same trouble with my radio and found that the only way to stop it was to tune it perfectly without any static etc. at all. However it may be different because it's the TV.

I have always asked when needing information and most people are just happy to oblige. For example, at the recent Bowral Tulip Time exhibition I had some queries about the SMR layout. The operators were extremely helpful. As I'm only 12, I felt great talking to them as equals!

Good on va' mates!!!

Re J. Smithers and B. Graham: I have been bagged and abused at school because I like, and use the school library for, model rail research. My teacher told us to do a project on our hobby. Yours truly did it on guess what?! (need I say what?) and got top marks. That recess I almost had my head flushed down the lavatory by the class for being boring! Some people will always be as J. Smithers described but we must help them along. Keep happernin'.

John Dimitrievich, Dapto, 2530.

Regarding the interesting item by Ron Cunningham, 'Out-ofs' in the AMRM December issue, perhaps I can shed more light on this subject, having spent the last 21 years of my railway career on the NSWGR, as an ASM in the 'deep south'

'Out-ofs' could be small goods or parcel consignments but were generally the former.

A customer would walk into Tumbarumba Station with a carton weighing 25 lbs (10kg) and enquire about the freight to Sydney or wherever by parcel rates. Then the canny ones would ask the rate by goods train which may be one-third the parcel charge and often opt for the cheaper.

If the railmotor was the next service back to Wagga, this goods consignment would travel thus along with the parcels, mails, etc., but with a 'goods' label attached. On arrival at Wagga the officer-on-duty would then decide if it went on by passenger train or to the goods shed for transit in a wagon loaded there.

On a pick-up goods train conveying an 'out-of' truck, a guard's road van waybill had to be provided to the guard from the starting station, giving him notice of the station or stations at which small consignments had to be unloaded.

Station stores always arrived by the 'out-of' truck: drums of lighting kerosene for the signals, cartons of wool waste for cleaning, cheesecloth for the same purpose, oil for the points, red and black paint for the station toilets, steps and scales, cartons of stationery, tins of Wundawax for that inevitable but highly serviceable brown lino, balls of string, crystals for the gents' urinal and rolls of emery paper for the signal levers.

When giving 'Control' the times a train occupied at a station, the details may include so much for crossing. so much for shunting and so much for o/o ('out-of')

Due to the shortage of LVs, often an S truck would be utilised as an o/o truck and would be 'sheeted out the door', as the term went, to protect the contents which were often groceries and other consignments which were better kept dry!

SL (standard lock) keys were carried by guards and if Burrumbuttock was unattended when No. 37 went through, the 'out- of' traffic was placed in the o/o room and secured.

Often on branch lines like the Corowa, the train brakevan would arrive fully laden with small goods consignments and parcels, mails, etc. at the junction station and I have personally seen it take us half an hour at Culcairn to unload the 'out-of' traffic, such was the volume offering.

Sadly, all this good business was driven away, not because the railway couldn't handle it, but because

myopic politicians had other ideas!

The VR always called this traffic 'van goods' and the SAR referred to it as 'put-outs'.

Maybe the QR, WAGR and TGR had other terms equally colourful.

I hope this is of some interest and not too long-

Lloyd Holmes, Byron Bay, 2481.

Might I elaborate on two wonderful articles - Ron Cunningham's 'Out-Ofs' in Issue 159 and the one by vourself in Issue 154 (with Addendum in Issue 160) on 'NSW FMW/NRWF Meat Wagons'

'Out-Ofs' was the term used for goods, etc. that were not only to be unloaded but also loaded en route on a train.

Some 'out-ofs' were placed in a brake van, mostly en route, as the brake van would originate on the train in a shunting yard.

An 'out-of' truck or van mostly came from goods depots or sheds where a brake van was not available and might be loaded for more than one specific station

along the route of that particular train.

An 'out-of' truck would be marshalled next to the engine if it was going the full journey on that train for several reasons. If the station was attended, the Station Master could begin unloading while the guard was walking up, but if it was unattended, the guard had to walk up in any case to carry out safe working by changing the staff and signals; also the fireman was required to assist if necessary but, in most cases, the driver would also buck in. In addition, it was much easier for the driver to stop the truck right outside the 'out-of' room door because there was nothing unusual in 15 or 20 tonnes of groceries, beer, etc. to be unloaded at one particular station.

It would be marshalled amongst the vehicles for a specific destination if it had to be detached at that place but had 'out- ofs' for stations prior to its arrival there.

Vehicles on a pick-up train would be marshalled next to the engine in order of the stations to which they had to be detached, starting from the first station to be arrived at.

Pick-up trains from Broadmeadow to Werris Creek usually had two 'out-of' vans, one each from Darling Harbour and Honevsuckle.

Werris Creek had a transship shed with a crew sorting out the loading for the diverging lines there each day after the shunter placed the trucks each morning. Then each afternoon they were taken to the shunting yard to be marshalled on their trains according to the direction they had to travel.

Yes, Greg Morris (Issue No. 160), the guard on a pick-up train really earned his money with the walking, shunting and heavy lifting, particularly in wet and foggy weather. But credit must also be given to the engine crews who would assist, otherwise the work would never get done. Forget about two man crews and diesel electric working; the steam days were an era of their own when train crews earned their meagre wage under atrocious conditions.

On the subject of the NSW FMW/NRWF meat wagons, when first brought into service, the CO2 inlet was only fitted to one side of the wagon (top photo, page 41, Issue 154, Feb. 1989) and similarly the gas cylinder at Aberdeen Meatworks was on one side only, which worked well if the wagons ran without being turned. Occasionally it was found they got turned and on occasions arrived at Aberdeen on No. 471, later No. 635, to find they were on the wrong side. So the engine, wagon(s) and brake van had to return to Muswellbrook to turn on the turntable. After being caught a few times, the crews and shunters would check at Muswellbrook before the train left. Later the sign "This end to be leading when going north" was painted on. As a further addition, some vehicles were fitted with inlets on both sides.

> Bruce Griffey, (Railway Engineman 1942-85). Werris Creek, 2341.

In regard to your review of the AR Gloucester bogies in the last issue, I believe some points need clarification. The modelled bogies are moulded in blue plastic. However this is not a good indicator of service colour. As far as I am aware, the Gloucester type were mostly painted in light grey.

The exceptions were:

(a) Two prototype bogies painted black;

(b) Eight bogies painted red for identification for test purposes.

The code of the low level bogies used on the NQIW wagons is DEA. These bogies do not have an 'inverted bolster' but rather a new bolster design. This does not affect the model as this feature is not obvious. What is important is that the bogies have 840mm (33") wheels to further lower the wagon.

The DCA bogies are fitted to NHFF, NHJF and NHKF wagons. They were only fitted to some NHGF or similar vehicles as an interim measure when the bogie deliveries outstripped the new NHFF wagon deliveries. As an SRA bogie engineer, I had one pair of DCA bogies fitted to an NQIX wagon for development purposes for the DEA bodie. The vehicle was in service for about one year as NQXY 22150. It has since reverted to an NQIX.

The DEA bogies were also all painted grey. These were delivered fitted to the NQIW wagons, with spare bogies that were intended to augment the WNA (2CN) bogie fleet, fitted to the NQJW wagons.

The Gloucester bogie has proved to be very successful in SRA service, providing lowered track and bogie wear with increased speeds.

Please take my comments as additions to your review, not criticism - it is hard to keep up with all prototype details!

On another track, the Branchline Ramblings article brought up something of interest to me - OPERATION. It seems that we model trains fastidiously but miss a lot in operation. Are there others out there that are interested or is this only for a few?

Is operation of interest enough for an article or is it 'too advanced' or boring to most readers? My own interest comes from operating the real ones so that I like to duplicate these functions in miniature. Comments, anyone?

Thanks for listening and keep up the good work with the magazine

> Brian Mcl auchlan Parramatta, 2150.

Your information pertaining to the CR GB/GBX Open Wagon Kits was interesting, although a little inaccurate (December 1989 issue).

Some 160 GB types ended up in coal traffic as the GH and they are now classified AOKF not AOEY. The AOKF are supplemented by AOJF which were once GP and GPA types.

The GB has quite a history and it is doubtful if any other wagon has ever graced Australian rails to serve its master so usefully. The GBs of English origin, with low strength couplers and of only 40 ton 'capacity', now work as hard as any wagon in Australia in 2.4km trains as the AOKF with high strength couplers (one is a rotary), hungry boards and 60 tonne capacity, whilst averaging in excess of 14,000 kms per period (13 periods a year).

A number of AOEF (were AOEX, AOEY) served in the Tarcoola Gravel Rake for the Stuart Highway construction and others were in the MMM concentrate traffic Broken Hill to Adelaide. These latter wagons ended up with welded doors and reinforced coping rails. Due to the ravages of time and backhoe damage, many were stored with damaged bodies. These wagons have then become the source of underframes for other uses

GB underframes can now be found under the 28 ATOF/Y tank wagons in Mereenie crude oil service, 28 AQFF fitted with surplus Westrail iron ore containers in concentrate traffic from Broken Hill to Whyalla, and as rear end generator sets AZGF/Y. A number are held in reserve in case of a coal train accident.

Not all of the GBs were ever assembled as open

MAILBAG

wagons, hence the RGB flat wagons now mainly in concrete sleeper traffic. The unopened wooden crates of doors and pressings were consigned, under my direction, to scrap in 1985. RGB types were also used to piggyback narrow gauge coal trains, complete with steam engine during the conversion of the Leigh Creek line to standard gauge operation. Now this was quite a unique operation and would make a good model project.

Generally the AOEX was only a modification of the AOEY (now AOEF) in that they had multiple hole pull rods, handbrake modifications and grade control valves fitted. A later version is the AODF which has an all welded underframe. Ten AODF types saw service on the Eyre Peninsula narrow gauge as the ENOJ. The AODF and AOEF types can now be seen carrying steel sections to Perth, but in the near future, in what will be the 'last round up', they will be subject to minor modifications and pressed into a unit train for cast slab traffic, Whyalla to Adelaide, for a 63 tonne payload and 110 km/h running - a fitting grand finale.

Now, for the kit manufacturers, how about something modern, yet unique? The two-pack three bogied AQEY is now one of, if not the most highly productive, wagon to be found in Australia, and should be seen on many layouts loaded one and a half high with con-

Les Smith, Chief Mechanical Engineer, Australian National.

Sir.

With the current state-of-the-art commercial models available, life is getting harder and harder for both your average and expert nit-picker. Now we are being subjected to models of equipment that didn't even exist. A case to ponder is the fabulous NSWGR 37 class. Herewith, I place my left foot firmly in my mouth and ask - which 37 class? The weight diagram printed in AMRM has a slope front cab - definitely not from a 36 class as shown on the model - this drawing is not labelled as a 37 class, simply a Pacific (4-6-2) type (drawing dated 31/7/33, loose leaf insert in a weight diagram book with the name C.A. Cardew on the front cover).

The model of 3701 bears a distinct resemblance to another drawing which originally came into my possession as a postcard size negative print - no date, no signature, but it does appear to be a NSWGR drawing and this loco does carry the number 3701. This drawing shows an Elesco feed waterheater as per the model, a 36 class cab and tender as per the model, but there the resemblance to a 36 class modification ceases. Steam admission to cylinders is via 'Lentz' poppet valves. 25" dia. cylinders drive - you read it here - 6'3" dia. driving wheels, definitely not your modified 36 class

Nit-pickers of the world unite - is this a victory or just another picked nit?

In closing, can anyone produce drawings of the equally fabulous 2-8-8-0/2-6-8-0 proposed to use 57 class like to see!

Phil Kelly, Condell Park, 2200.

In reply to Phil Kelly's request for information re the projected 37 class types, I can provide the following information, having addressed similar queries to the late C.A. Cardew and the late Harold Young in interviews with them in the mid to late 1960s. The Pacific with the slope fronted cab was indeed the intended rebuild of the 36 class. These locos gave considerable trouble with firebox stay breakages and throatplate fractures quite early in their lives and the CME of the day (Harold Young) asked his officers to scheme a conversion to a wide firebox type, the projected advantages being several: to exorcise the stay troubles, to obtain a less temperamental steamer by using a wide grate more suited to a variety of coal, and to obtain a better running and balanced engine by the incorporation of a Delta trailing truck. The proposal involved cutting the frames behind the driving axle and splicing on a new rear end, and adding a new course to the

boiler and a wide, round top firebox. The proposal was worked out in some detail and submitted to the Commissioner for approval, but the financial pressures of the time and the innate conservatism of Mr Hartigan combined to kill the project. That Mr Young knew something would have to be done in due course is evidenced by the leaving of the 37 series blank when the new mainline Pacific was on the drawing boards in 1938. The eventual post-war rebuilding of the 36 class was, of course, rather less drastic than the earlier proposal and, as it was intended to encompass the whole class, there was no renumbering involved. The drawing to which the model 3701 bears a resemblance was not produced by the NSWGR but by, or for, the Sydney representative of the Superheater Company, (I think his name was Mr Dick York). Although superficially a NSWGR type, it was in fact much larger than anything the NSWGR contemplated and incorporated a number of proprietary fittings for which the Superheater Company was the Australian agent, notably the feedwater heater and Lentz rotary cam valve motion. It is possible it was produced when Mr Young was first considering what form his new express engine should take, but there is no evidence that it was ever seriously contemplated as the 38 class. Although a very large Pacific, it's essentially British in concept, whereas the 38 class which was built was largely American. The SRA Archives has outline drawings of the proposed 2-6-8-0/2- 8-8-0 types as well as a number of 4-6-2, 2-8-2, 2-8-0, 2-6-0, 2-8-2T and 4-8-2 proposals which never saw the light of day.

lan Dunn

Sir.

No doubt other readers have picked up the error in the figured dimensions on the drawing of the Wolgan Valley Shay locomotive on page 28 of AMRM for Feb. 1990, in which the 37'3" centre distance shown between the two bogies under the locomotive itself appears to be incorrect when looked at in association with the 10'10" distance between the centres of the two rearmost bogies and the overall wheelbase of 41'7".

Scaling the drawing (which I know that one should never do) leads me to believe that the 37'3" dimension actually applies to the distance between the centres of the foremost and rearmost bogies (37'3" plus the 4'4" of the bogie wheel centres adding up to 41'7") and that the actual centre distance of the two bogies beneath the loco itself is 37'3" minus 10'10", equalling 26'5".

This error is obviously in the original drawing and, of course, cannot be laid at the feet of AMRM and only goes to show that one should always look very carefully at any drawing with dimensions thereon. It is so easy to make a mistake such as this one when setting down running dimensions on a drawing. I know, I've done it myself every so often.

W.A. Pearce, Kensington, 3031.

Sir.

Allow me to thank those readers who wrote to me and answered some of the questions in my last letter (December issue). The information has been greatly appreciated, as has the fact that you took the time and effort. Thank you also to the Editor for his comments and help.

Now for some more questions and requests. My brother and I would be interested in hearing from people who have used computers in the control of their layouts. He has a good deal more expertise than I do in that field and would like to investigate ways in which computers can be utilised. He uses an Apple IIGS system and would especially like to hear about the use of Apple computers, but other brands would also be of interest. If you or your club have done anything, and would like to share your results, then we would appreciate receiving any information that you can provide. You could write to me at 2/39 Waratah St, Leeton, 2705, or prepare a letter or article for the pages of AMRM.

We would like information about any ways in which computers have been used in running a model railway, along with some idea of their effectiveness. What software was used? Was it commercial, or your own original work? Hardware also - what did you use and how suitable was it? Is it readily available or did you have to produce your own? To what extent was the layout controlled - peripheral tasks only, full control of movement, switches, routes, etc. or somewhere in between?

Obviously we will be happy to share any information we receive, or any progress we make ourselves. At this early stage we are only beginning to think about possible uses and would appreciate any leads, ideas or help of any kind that we can get.

> Geoff Mascord, Leeton, 2705.

Sir.

The review of the NSWR three position signal kit (Issue 160, page 48) contains a serious error in the prototypical description part of the review.

By daylight the arm position gives the signal aspect. By night an auxiliary colour light head below the main signal combines with the three position signal to give the aspect. This was the standard NSWR twin head colour light signal code. Stop: red over red. Caution: green over red. Proceed: green over green.

Kerosene lit signals on the Main Southern used an auxiliary spectacle plate in front of a kero lamp below the main signal. Electrically lit signals on the Illawarra line used a dwarf colour light head below the main signal. This particular signal was at the down end of Engadine station on the down line. It was replaced by multi-aspect colour light signals when electrification was completed in 1980.

I trust the above will be taken as constructive. I have gained lots of useful data from reviews. The BL review in the same issue was very valuable in describing which locos were allocated to which gauge and the dates of entry to service.

Re Ron Cunningham's comments on the decline of modelling real railways, we are all getting better informed and are tending to model a specific line and area, not just Union Pacific which is anything painted for UP.

Rod Tonkin, Newman, 6753.

Sir,

As an O scaler, I was pleased to see Rod Burgess' American layout featured in Issue 159, although it appeared to me there were commercial reasons for this insertion.

What did not please me was the fact that at the Liverpool exhibition a new finescale 'Australian' layout (Kaloola) made its first appearance and only got three lines of mention in the exhibition report. I believe this layout to be a turning point in O scale at exhibitions and Graham Holland should be congratulated. It's about time O scale in this country presented itself as HO does (I don't mean brass locos, etc., just good detail and scenery AND, most of all, two rail running).

Hopefully in the near future Kaloola will be featured and Graham's work shared with us all.

Ron Fox, Warana Beach, 4575.

Ron raises two interesting points in his letter. Firstly AMRM unashamedly covers any model railway layout in Australia, whether it is 0, HO or Z scale, privately or commercially displayed. All the owners have to do is write the article and produce the photographs or contact AMRM regarding coverage. We will look forward to covering Graham's superb layout, Kaloola, in a future issue.

The second point is that some participants or readers become discouraged when their display or a display special to them does not receive extensive coverage in an AMRM exhibition report. Exhibition reports must be brief! If this were not the case then each year three issues of AMRM would be exhibition reports. In gaining the material for the report, the compiler has to rely on his knowledge of the layout, use the handout for information or speak at length to the owner/builder of the display. Achieving the latter at

MAILBAG

a Sydney exhibition is very difficult and would take over two days, time most volunteers do not have available. - Editor.

Sir.

In response to lain Stuart, Cameron Milne, et al (Mailbag, Feb '90), regarding broad gauge modelling (HOb51/4), I have done a little fooling around with HOb51/4 and I have used EM track. The reasons are manifold: track is available to save unnecessary hand laying of lengthy lines, standards exist and, if one measures (NOT calculates) the track gauge, it becomes fairly difficult to be certain whether one is seeing 5'3" or 5'21/2". Further, the conversion of standard gauge HO wheelsets to the HOb51/4 is fairly routine. Discussions with the people at K&M have shown that, if there was enough interest to make it worthwhile. HOb51/4 wheelsets to a widened RP25 would be easy. When one examines the three axle lengths produced, an axle of 26mm length with wheels spaced for EM gives a pinpoint length very close to that seen on 23.8mm axles and the small (not top-hat) brass bearings will work with these.

Thus, we end up with HOb51/4 using RP25 widened in back-to- back and track gauge by 1.7mm. Call it RP25 + 1.7 if you like. Alas, on most models, a means of widening the trucks will need to be found since RP25 has a wider tyre profile than true 1:87 scale. Even though most standard gauge trucks have an inside measurement close to scale for broad gauge, the extra tyre width will require wider truck frame spacing to clear the tyre cheeks, especially if metal frames are used with metal wheels. Even the trucks on the brass SAR 900 class were scale width, stuffed with standard gauge wheelsets. The trucks for passenger and modern freight cars can usually be widened a snifter by replacing the cross bolster or, on some American made trucks, e.g. Roundhouse, will stand having the inner faces ground slightly.

So why bother, you may ask? HOb51/4 really shows itself if you consider 3-rail dual-gauge, as seen in Adelaide and Melbourne, among other places. The only thing the prototype does that HOb51/4 can't do is 4-rail dual-gauge, which is extremely rare anyway and which inability is a product of the flange thickness of RP25. (The back-to-back is not wide enough to fit over even strap style rails for standard gauge.)

There, then, is your standard and now you CAN model the old Pt. Pirie or Gladstone triple gauge yards and, for the inquisitive, the dual gauge turntable in Adelaide is 3-rail with a joggle in the standard gauge track, so the common rail is always on the left, regardless of which end you look at.

Just don't contemplate mixed gauge traffic. The gauges are never mixed on main lines, except in extremely unusual circumstances such as shared bridges, and even terminal facilities prefer to keep them separate when shared facilities would cause too much congestion. Platforms, loco depots, that's about all.

Paull A. Alekna, Chester Hill, 2162.

Sir,

As a regular reader of AMRM, I am most appreciative of the quality and content.

However, I must express some frustration in endeavouring to support your advertisers.

I am well aware that at least some of those businesses are a little fragile, and that some are operated on a part-time basis. Therein hangs the tale. Could all of the advertisers include their trading hours in their ad? Even those in the Hobby Shop Directory. There is nothing more annoying than driving across town, only to find that the business in question won't be open until another day/time.

John Doherty, Morningside, 4,170.

Sir,

I am concerned about comments regarding the Brazilian 'Frateschi' models and proposals to convert them to operate on 12mm gauge track.

The Frateschi models are not to HO scale; they are

models of metre gauge prototypes running on HO scale track. They are already narrow gauge and should not be adapted to gauges less than 16.5mm.

A G12 locomotive is only 12'2" (3.71m) high. This makes it about the same height as the low short hood on an EMD standard locomotive SD60, GP38 or similar.

A comparison with a Frateschi model and an Athearn model will reveal that the G12 is as tall or taller than the 14'9" (4.49m) US domestic unit.

I think Frateschi selected the scale, about 1:70 or about 4.35mm/ft, in order to use existing HO US prototype freight and passenger cars to represent Brazilian metre gauge prototypes. The U20C and G22 are to the same scale. This does not stop Australian modellers using the G12 but it should be used with Sn3½ models which it is much closer to in overall size, although a little small (about 90% of S scale). This difference is less than that between British OO and HO. The Frateschi models are about 25% too big for HO or about twice the difference between British OO and HO.

It should be noted that the G12, as modelled by Frateschi, has the close clearance cab option which was not applied to any G12 for use in Australia and a modified cab roof would be required to represent any Australian unit. The Australian cab windows were vertical rather than angled and the fixed panes were larger.

All Australian-built G12 locomotives were longer than the US built versions, 44'6" (13.56m) over headstocks compared with 43'0" (13.11m), and, by arranging the radiator slightly differently, had a small end platform on the rear of the unit. (This note corrects an error in my 1973 book - I was then under the impression that only G8 models had rear platforms.) This means that the Frateschi model is less suitable to represent Australian G12 locomotives than New Zealand, where most G12s came from the US and Canada. (Ten NZR G12s were built by Clyde and they were longer and had the back platform also!)

Another problem is that the pattern of bogie on the Frateschi model was only used under the WAGR standard gauge J class which was a model G6 with an end cab. Since it is a standard gauge locomotive, Frateschi bogies would be overscale for an HO scale model.

The wheelbase of the BoBo bogie is 8' (2.44m). The wheelbase of the AIA AIA bogie used in Queensland (and New Zealand) is 10'6" (3.2m). Adapting the model with new sideframes would result in the bogie looking very compressed or the wheelsets not being in line with the axleboxes, even on the outer axles where they would not be represented at all.

The Frateschi model is equipped with dynamic brakes on the short hood. Only the BHP Whyalla locomotives had these, although a G8 at Fyansford Cement Works had them, later becoming VR T413.

I do not believe that marketing the Frateschi G12 in Australia would be a worthwhile proposition since it would only be an approximate representation and not to one of the widely used scales.

I understand that an Australian company is *considering* production of an HO *scale* model which could be adapted to either a G12 (QR 1400) or G8 (VR T (T-1))

I am concerned that AMRM did not clarify the scale of the model other than as an aside given that much nugatory work has been done on conversion to 12mm gauge.

It is surprising that so many people (in NZ, UK and Australia) are unaware of the true size of a fairly common locomotive to the extent of mistaking its scale.

Incidentally, all G12 locomotives were built with model D19 or D29 traction motors, which have a minimum gauge of 1 metre. A 1:70 scale G12 on 12mm gauge would represent 840mm and on 10.5mm gauge 735mm. Even if fitted with D36 motors, the narrowest possible gauge for a prototype G12 is 36" (914mm).

Peter Clark, Canberra, 2608.

Frateschi, in their 1986 catalogue, indicate that their models are HO scale. The model under discussion is listed as 'Model of General Motors G-12 locomotive, B&B axle arrangement'. It is understood that this is the American export version of the G-12 which was built to a smaller loading gauge. To show the comparison between the model and the prototype, refer to the table below.

EMD G12		D	QR	BHP	NZR	Frateschi
		1400 cls	DE 3-9	DA	Model	
	Length	43'0"	44'6"	44'6"	43'0"	48'7"
	Width	8'11"	9'3"	9'3"	9'2"	9'6"
	Height	12'0"	12'2"	12'2"	12'2"	14'3"

All dimensions have been rounded off to the nearest inch. The Frateschi model was measured in HO scale of 3.5mm:1' - Editor.

Sir

I am writing in reply to Geoff Perkins' request for information about replacement metal-tyred wheelsets.

Apparently, Alan Gibson (Unit 1, Cotenham Barn, Panxworth, Norwich, Norfolk, NR13 6JG, England) has 6mm diameter, steel- tyred wheels available as a direct replacement for Peco and Graham Farish wheelsets. In 1988 these were priced at $\pounds 0.33$ per axle. Having steel tyres, they could affect the operation of Kadee couplers, if magnetic uncoupling ramps are used.

I too, have experimented with hand-laid turnouts in N scale, using code 40 rail. However, I gave up on the project. NMRA standards, while being finer than most N scale standards, still prevent the modeller from achieving a truly realistic result. The reason for this is, of course, because the flangeways are too wide, the results of overscale wheels.

Still on the subject of wheel and track standards, lan Stuart is correct in saying that the average modeller doesn't seem to care when it comes to finescale standards. A case in point: a number of years ago an enterprising American company started producing very nice exact-scale replacement wheels in HO. Unfortunately I have not seen any ads by this company since 1982, nor have I seen any HO American layouts built to exact scale standards. Why? Well it could be the old enemy of good ideas: apathy.

After saying all the above, NMRA RP25 (in HO and N) is still a good wheel standard. It works well and looks fine to the casual observers, but it is not for me.

lan, about using 18 or 18.2mm gauge to represent 5'3", it is a good idea. I've tried 18.83 using P4 wheels, which yielded good results. Don't be scared to start; the most difficult aspect of using a more accurate gauge would be regauging locomotives. I might add that your project would be simpler if you used P4 wheels. They will fit into commercial bogies more easily than gauge-widened RP25. In short, join the Scalefour Society.

Nigel Gardener, West Beach, 5024.

Sir

Reflecting on your article on livestock within the wagons (AMRM, October 1989) prompts me to recall a similar situation of my own. Quite some time ago, when I had built a large cattle train using balsa, I dutifully applied a white coating of disinfectant powder along the lower half as per the then prototype practice.

All and sundry seemed suitable impressed until the usual desultory remarks of not being finished, there's nothing on the floor, it doesn't smell, etc. came along.

Well, for the perfectionist, may I suggest adding a little water to a small amount of bull@!%* and letting it ferment for a week or so, before applying the resultant 'liquide' to the floor of the said wagons with a paint brush. (The remainder can be watered down and works very well on the garden.)

The effect could well be outstanding, particularly at exhibitions - with the train between the spectators and a source of gentle breeze blowing in their direction. Ah, nothing like a bracing sou'easter! After the running session, a quick dip under the tap (note that plastic wagons clean more easily than balsa) and all is clean again for storage.

However, to carry this to the extreme, I happen to know a chap whose job it is to physically clean out the stock wagons and he was overheard once talking about

his workmates' complaints that he doesn't wash prior to catching the suburban home! Just think, we could even model this scenario by removing the roof of one of our suburban passenger cars and gently applying a drop of liquid pong on one of the seats (or would he prefer to stand?)

Oh, yuk, the things people do to model realism! Keep up the good work.

> Glenn Wright, Edens Landing, 4207.

On the subject of authenticity, we thank the unidentified Queensland reader who donated a dried cow pat for fine detailing of cattle wagons. - Editor.

Sir

Reading through the October 1989 issue of the American magazine 'Model Railroader', I came across an advertisement offering for sale O gauge model livestock cars so fitted to give out cow, horse, pig or chicken sounds. After I'd controlled my fit of mirth and erased from my mind the image of a train of such cars passing by and sounding like a version of the song 'Old Macdonald had a Farm', I started to think seriously about the subject of noise and the model railway.

We have all seen model railway layouts that are amazingly lifelike, with finely detailed locos and vehicles travelling through beautifully modelled and very realistic scenery and have marvelled at the sight, but we must admit that realism is not only in the eye of the beholder, it is also in the ear. Yes, I know that one can get loco models fitted with audio systems that imitate the sounds of whistles, air horns, bells, air compressors and all the other noise that an operating loco makes, but the sounds of an operating railway are much more than just a loco working.

For example, let's look at (or should I say listen to) a typical country passenger station in Australia (or even anywhere) and bring to our mind the noises that one hears when a passenger train makes a stop at this station. We hear the squeak and grind of the brake shoes as the train comes to a halt and often then there is some sort of amplified announcement, sometimes quite understandable, sometimes just a jumble of noise, regarding the train's future progress. As passengers board the train, the sound of carriage doors slamming is heard, sometimes an electric bell rings to signal the departure, the guard blows his whistle and the train moves off. All of these sounds are in addition to any noises that the motive power makes.

If there is a local goods yard or engine shed of some size, these places sometimes have their own PA systems for passing instructions to shunters, drivers, etc. The station building has a phone which occasionally rings, as does the signal box, which also receives distinctive bell signals from other boxes, all of which can often be heard over quite surprising distances, especially out in the country which is often the locale for our model station. If the yard has stock races and loading facilities, one could hear the occasional moo, bellow or baa from their occupants although, reverting briefly to the start of this letter, I've seen a lot of livestock trains on the move and cannot remember ever hearing much in the way of noise from the animals therein, except perhaps that occasioned by the jerks of the train stopping or starting.

Other noises that come to mind are a tractor working in the fields, a motor truck or car in the distance, a race or football broadcast from the town pub, dogs barking and a train in the distance, again not so much loco noises but the overall roar of a train moving. This noise of course can differ greatly depending on the make-up of the train. This noise of a train on the move might be the reason why I can't remember hearing much in the way of animal noises from livestock trains. Perhaps such cries have been lost in the overall train noise.

Now, having said all that, one should perhaps think how a suitable system could be provided on the average model railway to provide such background sounds. Most of the sounds that I've mentioned emanate from a fixed location such as the station building, signal box, etc., so tiny loudspeakers as fitted

to locos would not be required. In this case, small cheap speakers could be located beneath the baseboard at appropriate places. Possibly a single amplifier only would be required but it is likely that individual sound tapes and the means of reproducing them would be required for the various locations. which would no doubt involve quite a big cost. Finally, some sort of control arrangement would be required. This may be automatic for some locations but would have to probably provide a means of manual operation for other locations. Perhaps the most difficult problem of all would be obtaining recordings of some of these sounds. Who amongst us, for instance, would be able to provide a recording of the sounds of a passenger train stopping at and leaving a country station, especially something from the days of steam?

However, I don't believe that such a system could not be set up by a technically minded modeller (I couldn't do it as I don't know enough about sound systems and electronics) and I think that any layout having such a system would present a considerably improved degree of realism to its operators and viewers. So, as well as looking realistic, let's make our layout sound realistic too.

Regarding the carriage of chickens or other poultry in special wagons, I don't know of any such wagons here in Australia but the Chinese People's Railway do have three level slatted sided cars, class J4, which I have seen laden with live ducks en-route to Hong Kong, no doubt for all the Peking Duck restaurants in that city.

W.A.Pearce, Kensington, 3031.

Sir.

I am seeking your help in finding the owner of a cap covered in model railway badges from throughout Australia and New Zealand. It looks like it would hold great sentimental value to the owner and was found in Bolivar, SA approximately two years ago. Presumedly, it fell out of a car. Mr & Mrs Ian Lang of Euston, NSW found the cap but had no idea how to go about finding the owner until a chance conversation with my husband. He is a model railway enthusiast and promised to try to find an owner by contacting your organisation and the South Australian organisation.

One badge on the cap has the letters SASMEE engraved on the front and the serial number 95 engraved on the back. None of the other badges have any numbers on the back at all.

The cap is still with lan Lang and if you have any success locating the owner, he would be glad to return it to him.

Robyn Northey, Swan Hill, 3585.

Contact AMRM on (02) 661 4046 for the lan's phone number. - Editor.

45 CLASS SURVEY

James Hollinworth, in a letter regarding the 45, raised the point of an extra louvred panel on some NSW SRA 45 class units. While James has suggested that the extra panel, adjacent to the air intake filter, may have been to provide airflow around the body, we have been able to ascertain that the air intake filters have been changed from oil mesh to a disposable fibreglass type. In the conversion, the filter face was changed from grille mesh to louvres, plus the additional louvre panel adjacent, on the No.2 end. The louvres are to protect the fibreglass filter from water which can affect their efficiency.

To enable modellers to modify their AR Kit model, AMRM is compiling a brief article which will show the location of these changes. Unfortunately, records do not indicate which locomotives have been modified. To date, sixteen of the existing 39 class members have been checked, but we need assistance from interested readers who have visual side access to these locomotives, currently working in Northern NSW.

Those interested in assisting should write to the Editor for a detailed survey sheet:

45 Survey SCR Publications PO Box 4 LITTLE BAY 2036

Last Issue

Last issue we wrongly advised that John Tipper was reprinting the 1955 Meccano Magazine. John is only reprinting some of the instructions from the 1955 issue.

Shavs

Reader Rod Tier has written with further information published about the assembly of the Roundhouse Shay. These can be found in the February 1984 issue of Railroad Model Craftsman (extensive product review) and in the November/December 1983 issue of Model Railroading, where articles cover assembly tips, performance testing and performance improvement.

Good Reading

It is interesting to note that the January 1990 issue of the NSW RTM Roundhouse includes a number of historically oriented articles. One that may interest a number of readers is the first part of Harry Wright's story on the Night Mail which is a description of the Glen Innes Mail behind 3631. Diesel and electric modellers will find John Stormont's photos of the 40s, 41s and 46s very interesting, the original 46 livery being a feature. Steam purists will be delighted with the weathered green 3805.

Thef

It is pleasing to report that the culprits who broke into both Micro Models and Northside Hobbies have been apprehended. It is understood that they have been accused of perpetrating all three break-ins, and that a majority of the model railway equipment has been recovered.

Unfortunately, two other establishments have received unwelcome visitors. The Sydney N Scale Model Railway Club lost \$5,500 worth of rollingstock in January, while Doug Crisp's Port Transport Books & Models' Port Adelaide store was also highlighted by thieves.

Railway Stamps

Ron Madden, the philatelic distributor for Puffing Billy, Pichi Richi and the Don River railway systems, has advised of a number of railway stamp releases - all in 1989

The mini sheet of Puffing Billy Railway (Sheet No.2) retails for \$4.00 and includes four \$1.00 stamps that have been reproduced in colour. Illustrated is green NA7A and two views of Climax 1694 and red NA. The $12\ cm\ x\ 9\ cm\ mini\ sheet$ is accompanied by a card detailing the history of the Puffing Billy Railway.

Mini sheet No.3 from the Pichi Richi Railway is the same size spread as its counterpart from Puffing Billy and also includes the card detailing the Society and the line. The four \$1.00 letter fee stamps depict green W933 and 934, and maroon diesels NB30 and NSU52.

The Don River has been producing stamps for a few years, although they consist of only two colours and, having ten 30c stamps, retail at \$3.00 a 12 cm x 20 cm sheet. The latest sheet features CSR locos, a Krauss 1908, an MA and a Fowler. Each stamp is reproduced twice, is black and has a green border. The next sheet from the Don River Railway is expected to be multi-colour.

These stamps are available from the individual tourist railways or from Madden Stamps, PO Box 331, Roseville, 2069. Allow extra for postage.

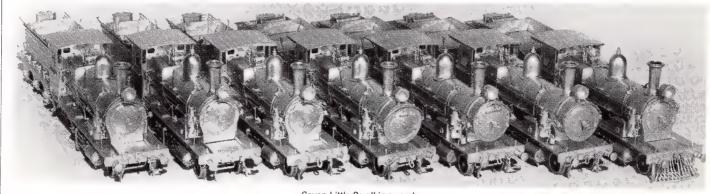
New Exhibition Displays

Two new model railway exhibitions have opened to the public recently, both on the New South Wales North Coast

Opened early January, Train Meadows at King Creek Road, Wauchope, is run by the Doherty family and features a very large display of HO equipment. While the trackplan of the main station is based on Wauchope, the layout does not follow any specific prototype, although both Lima and Powerline Australian outline models predominate.

A short drive from Port Macquarie, the display is sited alongside an interesting vertical curve on the North Coast Line.

AMRM NEWS



Seven Little Bs all in a row!

Classic Brass Models have released seven versions of the NSWR B (205) class in HO scale. Commonly known as the Z25 class, the above represents some of the variations applied to this class. Versions A through to G are assembled left to right. Full variation detail in the Classic advert in August 1989 issue.

Another model railway has opened for public display at 24 Pelican Circuit, Nambucca Heads. George Olive is the host and he runs Powerline and Lima equipment over 120m of scenicked track. George is open on Tuesdays, Thursdays, Saturdays and Sundays and all school holidays. He can be contacted on (065) 68 7395.

Vale

It is with regret that we advise that Joyce Mc-Taggart, the happy companion of Clive (who passed away in May 1989 - October 1989 issue), also passed away early in 1990. With Clive's illness, Joyce ran Austral Modelcraft for many years, her friendly style finding a place in the hearts of all her customers. It is a sad loss.

Calendars

AMRM is branching out with the production of high quality calendars. We have taken the opportunity to have lan Dunn prepare steam and diesel calendars similar in style to those he has prepared for the past decade or so.

The steam calendar will feature a wide variety of regular operations from the fifties and sixties in New South Wales, while the diesel calendar will encompass modern operation in all Australian mainland States.

Our calendars should be on sale at regular AMRM outlets by mid-September at around \$9.95 ea. As the print run will be restricted - order your copy NOW!!

Other Publications

Following our comments in the December 1989 issue, we have been approached by a number of authors to produce books on the infrastructure and operations of the NSWGR. Articles by these authors have been enthusiastically received in recent times and have been very informative to modellers, so we are pleased to be in a position to accept their offer.

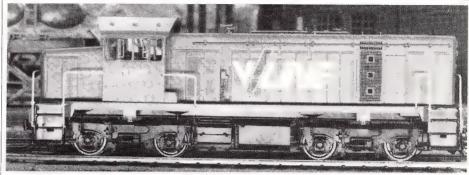
AMRM will produce the first book in the second half of this year. Details will be advised next issue - stay tuned.

Injection Resin Kits

Lloyd's Model Railways are shortly to release a set of NSWR BOB cars in HO scale. Four eight-car sets of these specially made cars were introduced during the Second World War. The models will be released in four car sets and almost be a 'shake the box' kit. Produced from low pressure injection moulded resin, the one-piece car body is complete, including fully relieved torpedo vents. A timber floor, which can be secured to the roof, will hold the underfloor detail and bogies. The detail on the sample provided is superb - as good as injection moulded styrene.

While this manufacturing process is new to Australia, it certainly makes up for the recent lack of new NSWR kits arriving on the market.

Lloyds plan a number of kits in this cream material, the R cars and private owner coal hopper being two such projects. They propose a simple R car set, if there is such a beast, and details will be known soon. The coal hopper will have a one piece resin bucket with



T407 is the pilot model of Precision Scale Models' 3rd Series VR T class, which was on display at the Corio and Croydon Exhibitions. This model, which will have bi-directional fibre-optic lighting, will be fully painted with fitted numbers, be fully glazed and will be engineered to run compatibly with most BGM/Samhongsa diesels. Delivery of Precision's Ts is expected in May 1990.

metal frame and running gear.

NSWR Convention

It is pleasing to report that the Modelling the Railways of NSW Convention is on again this year. To be held at the successful Petersham location, 1990 activities is being co-ordinated by Ray Pilgrim.

John Kiddell Memorial Award

The 1989 John Kiddell memorial Award was won by Lindsay Bennett with his article on Homemade Turnouts - The Easy Way.

News - Commercial

The news of the one-piece injection moulded resin kits, as detailed above is good for NSWR modellers. It is also interesting to reflect that Australia one had a number of one piece injection moulded resin kits. One commercially made was the SAR ELX kit, produced by EMCE in 1971. Its acceptance by modellers was indicated by it being sold out within months. This kit was preceded by a limited run of about 50 or so of the NSWR FHG brake van kit in HO scale. Although not

released commercially this was a fine product, which along with George Giraldi's Tele-Trains, was a true indicator that Australia was among the leaders of model railway technology. Unfortunately, we are not always able to sustain the commercial demand of the products, and the technology is lost to overseas interacts.

A new name on the NSWR scene has seen the re-release of the range of metal castings that were once marketed by Mansfield Hobbies. Krystall Castings will be retailing their metal castings direct to customers. See their advert this issue.

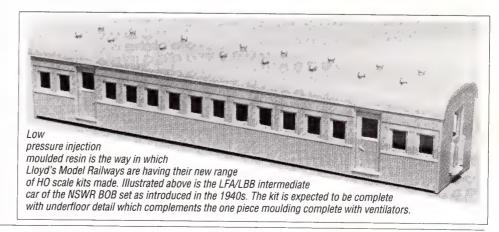
Data Sheets have released their HO scale sheets on the NSW SRA 442 and 45 class diesel electric locomotives.

Platform One has released a scenery aid in the form of rubber latex ballast adhesive. This product has the promise of being an aid to all modellers.

N-Trains have released their HLX louvre van kit, the review being expected next issue.

Five Star Models currently have a number of Delton C&S coaches, combines and RPOs in stock.

AMRM NEWS continues on page 62.





BELLBIRD

Steve Cullen's HOn21/2 scale Victorian narrow gauge layout, as told to Bob Gallagher

Steve Cullen has been a Victorian Railways HO scale modeller for over 14 years. A member of the Flinders Model Railway Society, he has been prolific in his modelling, and his attitude to helping others in the hobby is much appreciated. His hobby is in fact his family's hobby and he has been quite proud to point out the models completed by his wife, June.

With his fellow FMRS members, Steve has scratchbuilt VR models as an individual, in the family environment, as well as in the group atmosphere as organised by Society members.

phere as organised by Society members.

All this changed in 1987 when, looking for a new challenge, Steve decided to model the VR narrow gauge. To ensure the challenge was not put aside for further dabbling in HO, he sold all of his HO scale rollingstock models. He had become dissatisfied with the running quality of the HO scale four wheel stock and with narrow gauge he could "have more prototypical curves in the given amount of space".

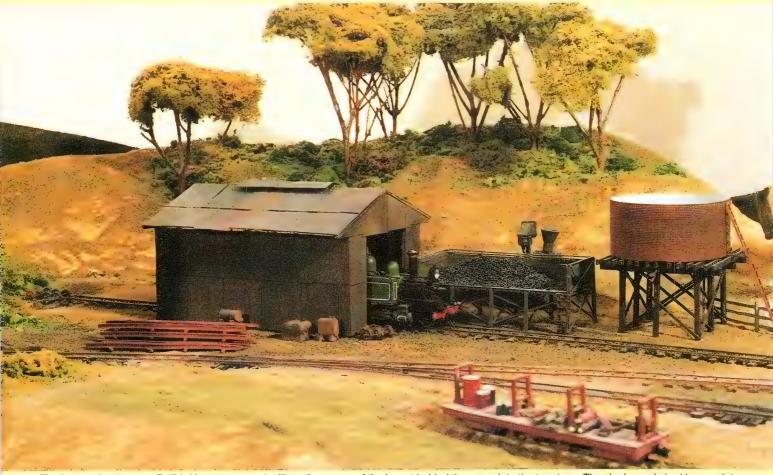
In making this change, Steve was able to reverse the model to layout building trend. Generally, modellers build models that take their fancy first, and then build a layout on which to run

Above: NA 7A runs into Hillend with a goods train destined for Bellbird, the line's terminus. With no passenger car attached, the passenger station is unattended.

Right: The mechanics at Reeve Motors use the space between their garage and trackside as the location for their waste. It is obviously 1959 and not the environment- conscious 1990s.



Australian MODEL RAILWAY Magazine. April 1990. Page 33.



The locomotive depot at Bellbird is compact and utilises the corner of the layout behind the curve into the terminus. The single road shed is complete with coal stage and water tank. The loco shed has been weathered to good effect.

them. When Steve changed, he first selected the area he was to model and then set about building the correct models for the layout.

The Bellbird Railway is based on a mythical line running in the Gippsland Lakes area. Working on the premise that the broad gauge Bairnsdale-Orbost line was not built, to enable the timber to be shipped out of Lake Reeve, the major port of the area, a 2'6" line was built up into the hills to Bellbird through Hillend.

The layout is set in the 1959 period. The real Bellbird is located east of Orbost and, while not having any industry, has a good pub! Hillend is a mining town near Tanjil. Both have fictitious roles in the railway. The selection of Bellbird as a layout name is not only linked to the Gippsland town but also affectionately to the ABC serial of the 1960s.

town but also affectionately to the ABC serial of the 1960s.

The layout is housed in a 3.2m x 2.13m room which is decorated in pastel shades to enhance the colours of the scenery.

Baseboards

Built so that it can be dismantled and moved to another location with minimal damage, the layout is built on 50mm x 25mm frames supporting a plywood deck, or in one instance a door.

The plywood is supported every 200 - 250mm with the track and scenery being added on top of this base. The layout is level, the scenery being used to create the impression of grades.

Track Design

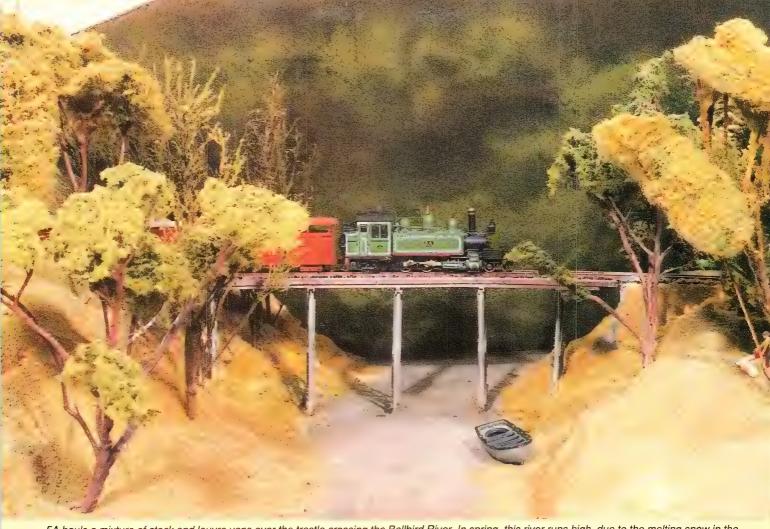
As the basic requirement was for a shunting layout, a point to point design was used. The layout has been placed round the four walls of the room, from the port at Reeve, on through Hillend and then Bellbird, each location being situated on a separate wall.

To enhance operation each location is provided with businesses that generate goods traffic, (rail of course) that has to be moved around the

The scenery in the foreground has been detailed for full effect. In this scene showing the house at Reeve, the fence on the railway boundary has been eaten away with time and blackened by the soot of the passing locomotives. To brighten his life, the owner has just finished repainting the house.

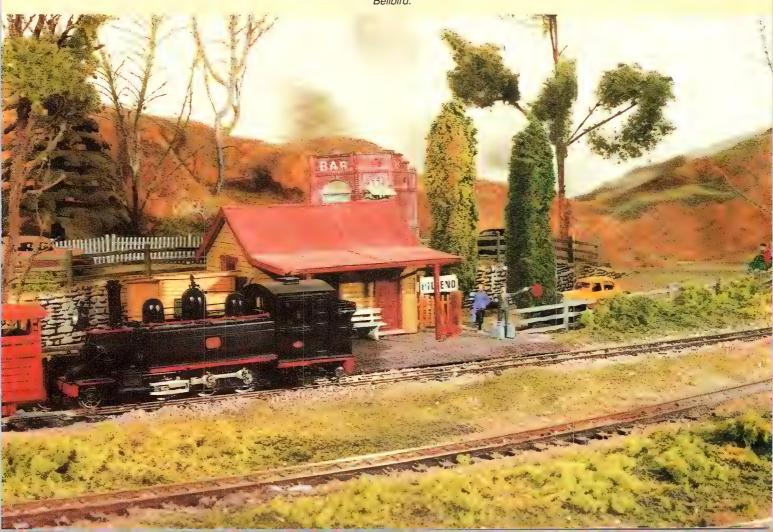


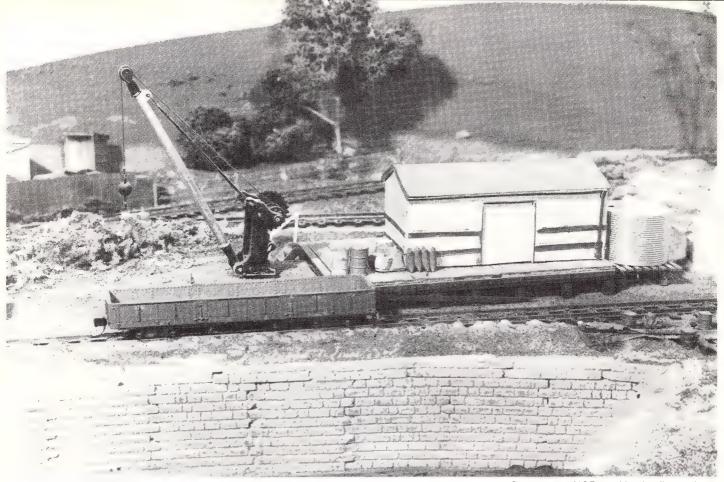
Page 34. Australian MODEL RAILWAY Magazine. April 1990.



5A hauls a mixture of stock and louvre vans over the trestle crossing the Bellbird River. In spring, this river runs high, due to the melting snow in the higher reaches but in autumn the boat is used for pleasure activities.

The Station Master's outstretched arm holds the red flag as 6A runs into Hillend with a mixed train. With the passenger car at the end of the train, and a number of shunting movements required, the single waiting passenger could wander over to the hotel for a nip or two before the train departs for Bellbird.





Warehouse The Later land Cattle Yard Goods Shed Timber Mill **BELLBIRD** Gravel Dump The Quarry BELLBIRD RAILWAY BALINEY Cattle Yard House Goods Shed HILLEND Store SCALE ... HO REEVE Station 318 GAUGE ... HOn21/2 Garage Shops I I SIZE ... 3.2m x 2.13m (10'6" x 9'0") Wharf Workbench under layout Goods Shed Seed

Open wagon NQR awaiting loading at the goods shed at Reeve. The stone lake wall is in the foreground.

lavout

Reeve has the wharf, goods shed, warehouse and gravel pit. The passenger station is close to a single road engine shed accompanied by coal road and watering facilities.

The track passes over the extensive water course of Lake Reeve on its way to Hillend, which has a station, goods shed, seed store, cattle yard and quarry.

After passing over the Bellbird River on yet another bridge, the line enters is Bellbird which has the station, loco depot and facilities, warehouse, cattle yard, goods shed and timber mill

Track

Peco Crazy Track has been used exclusively. This has been supported by Crazy Track points which are hand operated. The track has been laid directly on the baseboard and secured every 8cm.

The side of the rail has been painted, which not only enhances the scene, but also diminishes the slightly oversize height of the rail. The track is ballasted with fine river sand.

Ballast has been used sparingly around the points for they are temperamental when ballast gets into the mechanism. In places the track has been embedded into the scenery so that the rail level is at ground level.

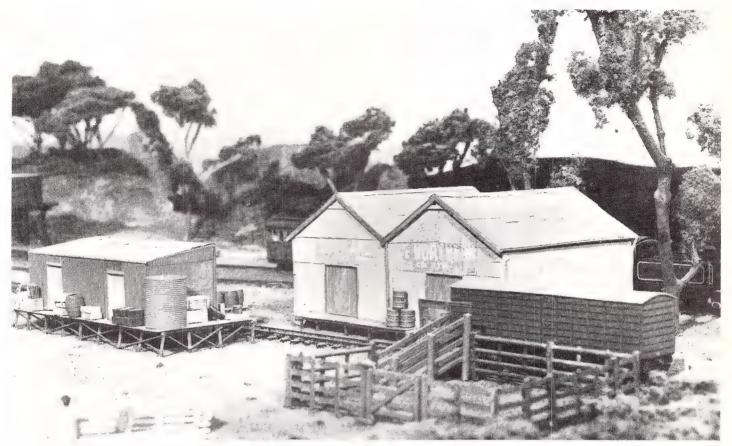
Electrical

The layout is wired for block control and powered by three Tempest Autopulse AP3000 throttles. The switching allows each controller to run the full length of the layout, as demand requires. Point motors are not used, all points being hand controlled.

Scenery

The scenery is plaster soaked paper towel, draped over a styro- foam base. This is then covered with acrylic paint and then detailed. Steve used to use a dark brown base, representing brown earth, but he then visited Harry Grosvenor's Orbella Valley Railway. Harry's influence saw Steve use lighter colours which, when added to the Hayden and Frary scenery

Page 36. Australian MODEL RAILWAY Magazine. April 1990.



The character of the Bellbird Railway is maintained by the numerous scratchbuilt structures. Typical of these is the overworked goods shed and Gippsland & Northern complexes at Bellbird.

methods, has produced for an impressive finish. This is accomplished with the gluing of ground foam to the scenery base with Aquadhere.

The trees are a variety of commercial and hand built styles. Some have Lilypilly armatures, while others are a local weed which has been covered with lichen and ground foam. The weed once grew at the South Melbourne cricket ground but, like the South Melbourne football team, it no longer exists.

Steve has now located a similar weed in the Dandenong Ranges, not on National Park land. These armatures are painted with acrylic paint, Rick Richardson, given a touch-up of white and brown and detailed, giving the effect of a gum tree.

Motor Vehicles

A good collection of motor vehicles adorns the layout. These have been collected over the years and used to good effect. They include a Matchbox Wolsley, Weico Holdens, a Kellogg's T Model plus various VWs, Chevs and Fords

Structures

Steve has been greatly influenced by Harry Grosvenor and, like Harry, scratchbuilt all the structures on the layout. He now works with Evergreen styrene materials as it is easier to cut and handle, producing a better model than the old process using timber. Despite this, the station building at Reeve was made from North Eastern timber.

All structures are based on the VR 2'6" gauge prototype with information coming from the sources listed in references, as well as from visits to the prototype and the Puffing Billy Railway.

All buildings have been built as individual models on a timber base and placed into the layout, the local scenery being blended up to the walls. All have been hand-painted.

The trestles have been built from timber and added to the layout as the track was laid. The thin wooden kebab type skewer was used for the bents, its diameter being slightly undersize, making the bridges look frail. Once in place, the plaster ground base was run in around the bents to complete the effect.

Locomotives

All locos are Alco HOn2½, each being painted in its individual style. Four NAs make up the roster, two green and two black. 8A is plain black, 6A is black with red lining, 3A olive green with white lining, while 7A is a light green with white lining.

The locos run very well and have not been specially treated except that each has been disassembled to allow access to the mechanism and

the pick-up suitably adjusted so that it does not touch the body of the loco. Running maintenance includes keeping the wheels and pickups clean and the axles and gears lubricated.

Rollingstock

All vehicles are either scratchbuilt or kitbuilt from the F&G range. The scratchbuilding material is Evergreen styrene, except for the roofs of the passenger cars which is made of the roofs of Broad Gauge Model T vans. This is nearly the correct profile and has to be cut down to size. The passenger cars have been built on the F&G underframe kit.

The passenger fleet consists of three NBH open tourist saloons built up from F&G kits, plus a scratchbuilt NB end loading open saloon, two NC vans and NBC combination

Goods stock includes eleven F&G plastic NQR open wagon kits, F&G log wagons, plus scratchbuilt NT insulated vans, NM cattle vans and NU louvre vans.

The cattle wagon was built using double sided tape applied to a section of plate glass. The tape was used to hold the sections of Evergreen styrene in place until glued. While time consuming, the result is pleasing.

The louvre van was built up from sections of styrene lapped over each other on double sided tape and cut up into sections after being glued in place.

All rollingstock has F&G bogies, fitted with Kadee N scale wheel/axle sets.



The timber mill at Bellbird generates rail traffic in and out of the small township.



NA 8A runs up the head shunt while running round its train at Reeve.

The interior detailing of the passenger cars is from the Preiser figure

range.

All models are fitted with Kadee N scale couplers. These were chosen in lieu of the HOn3 style due to the good operational reputation of the N scale type. With the use of below track magnets, the coupling/uncoupling process is a very smooth and produces fully effective operation.

Operation

The Bellbird Railway operating session of 2½ hours provides for the operation of four trains. The timetable is not yet finalised but allows for prototypical pauses between loco movements, solid references to which can be found in Frank Dyer's article on Train Shunting in various Model Railway Journals.

The cattleyard at Hillend is protected by a large gum which has lichen and ground foam foliage on the armature of a painted weed.



Page 38. Australian MODEL RAILWAY Magazine. April 1990.



3A and 7A double head a tourist special from Bellbird to the township of Reeve. In this scene they run over the edges of Lake Reeve.

References

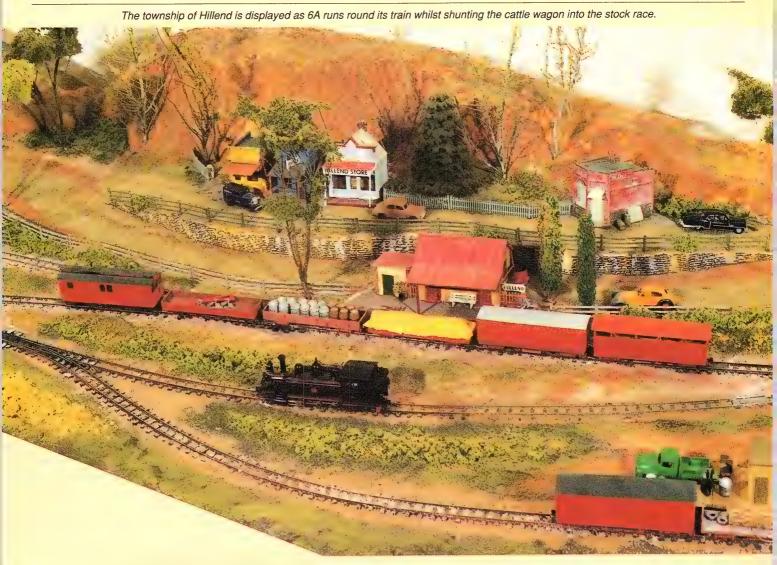
- Steve extensively used information from the following sources. 'G42 Puffing Billy's Big Brother', published by Puffing Billy Preservation Society
- 'That Little Train' by Peter Cuffley, published by Five Mile Press. Articles in Australian Model Railway Magazine.
- Articles in the Light Railway Research Society magazines. Membership of Puffing Billy Preservation Society.

Postscript

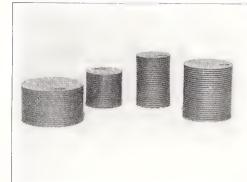
The Bellbird Railway was photographically covered in March 1989. Since then Steve and June have almost completed the scenery and have taken the opportunity to rationalise their locomotive fleet with the sale of one NA and the acquisition of a G42 Garratt.

Naturally AMRM will visit the Bellbird Railway in the future and

photograph a few more scenes for interested readers.



Australian MODEL RAILWAY Magazine. April 1990. Page 39.



lan Lindsay Models have released another tank kit, this one designed to satisfy the modeller who requires only the corrugated iron tanks. In HO scale, the epoxy moulded tanks represent the 500 gallon, 1000 gallon, 1000 gallon squat and the fettler tanks - four in all, all being priced at \$9.95.

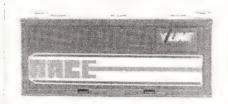
The HST loco shed by Hornby Railways (Cat. No. R282) is another model in the Town & Country Construction Kit OO scale range. Based on the shed at Old Oak Common, west of London, the multipiece, multi-coloured kit is quite extensive in that it includes hinged opening doors, magic- eye posts, roof ventilators and louvres, along with brick foundations and flood lighting with the recommendation.



dations and flood lighting. Illustrated assembly instructions are included, along with the recommendation to paint the parts before detaching from the sprues.



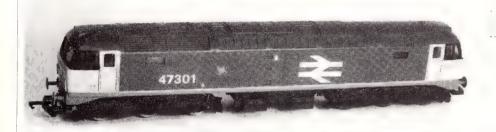
Originally released with the Minimodel NSWR MLV kit, Berg's Hobbies now has the three piece 2AE rivetted bogie assembled with Gibson 10.5mm plastic centred wheels and markets them for \$5.75 a pair. The drop frame rivetted bogie had plain bearings, a 6'6" wheelbase and was used extensively under louvre and refrigerator vans built in the 30s, 40s and early 50s. The bogie has been moulded in black Delrin. These have been painted grey for photographic purposes.



Powerline has released another container and markets it in a pair (\$4.95) or on their 48 fishbelly flat wagon (\$11.95). The container is the usual Powerline top loading plain-sided version, blue in colour with the normal RACE logo on the side. It also has the V/Line logo inside a brown panel in the top right hand corner of the side. Overprinted locally, the model has a quality finish.



A recent addition to the Lima British OO scale range is the Blue Circle cement hopper (Catalogue No. 305601). This model, which has the Blue Circle logo, comprises a fully assembled model with a V-shaped grey cement tank. The lettering is blue and the catwalk and underframe are black. Hornby-type couplers have been supplied, as well as a number of detailing components. These include: brake cylinders, brake lines, air lines and valves running up the side of the tank, handrails, shunter's steps and other ancillary detail items. These types of vehicles used air to discharge the cement powder. Most of this detail is supplied on sprues, pre-coloured in black or grey and when added to the model create a superb effect.

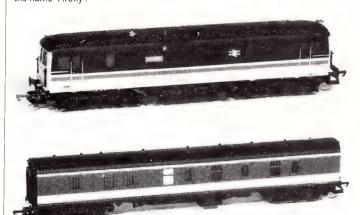


A recent arrival from Lima in Italy is 47301, a Class 47 diesel electric locomotive in Railfreight grey with a red strip livery. The model is priced at \$90.00 and is Catalogue No.205039.

Recent Arrivals from Lima



47609 (Cat. NO. 205268) is a Class 47 in the modern Intercity livery and carries the name 'Firefly'.





37401 (Cat. No. 205290) is a split head-code Class 37 in Intercity livery. Although it does not carry the Intercity logo, the locomotive is being used for the Intercity sector's charter work. It carries the 'Mary Queen of Scots' name in brass letters on a red backing plate.

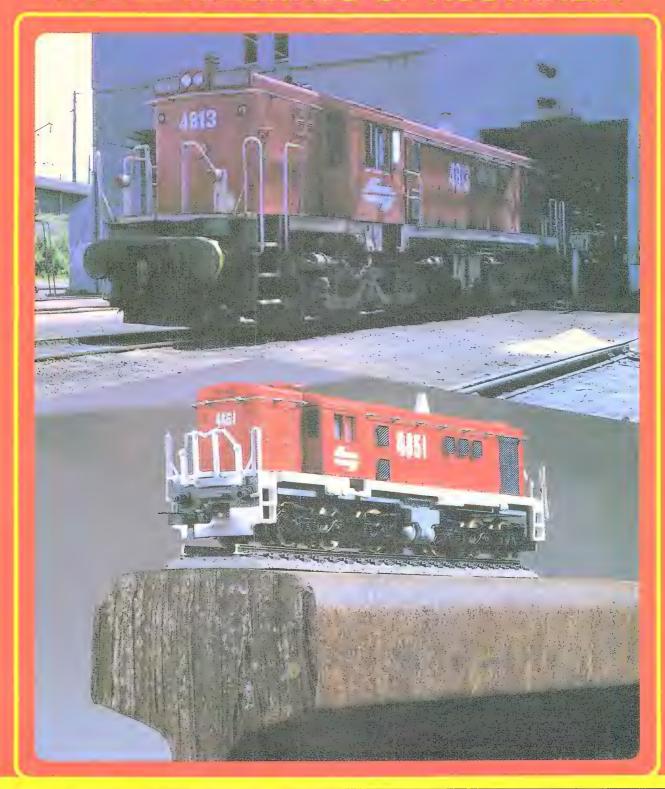
On left is 73138 (Cat. No.205271) is a Class 37 diesel in the modern Intercity three-tone livery with yellow cab ends and carries the name 'Post Haste' in gold letters on a red background plate.



09012 (Cat.No.205090) is a Class 09, 0-6-0 shunter in Intercity livery and named 'Dick Hardy', as a tribute to a former Depot Engineer at Stewarts Lane.

On left is BR standard gangwayed brake van in the Network South-East livery which was adopted in 1986 (Cat. No. 305389).

MODEL RAILWAYS OF AUSTRALIA



HO CATALOGUE 1990

TPOWERUNE

HEAVY HAULAGE LOCOMOTIVES

FOR PERFORMANCE & ATTENTION TO DETAIL

All of the high powered locos on this page feature:

- Reversing headlights and tailights
- Heavy ballast weights for best adhesion
- High quality rubber traction tyres
- Plated wheels for better contact
- High torque Ringfield style motors
- Dual motor versions available for really heavy trains.
- Historical & Maintenance Notes.
- 12 Month Warranty!

SRA (NSW) 81 CLASS

P201 - SINGLE MOTOR P202 - DUAL MOTOR



The 81 Class is now the backbone of the NSW system, and runs daily into Victoria on the standard gauge, also venturing occasionally into South Australia on the Broken Hill to Adelaide line.



P216 - SINGLE MOTOR P217 - DUAL MOTOR

As running on the Broad Gauge in Victoria and South Australia.

NEW FOR 1990

AUSTRALIAN NATIONAL BL CLASS

P211 - SINGLE MOTOR P212 - DUAL MOTOR



The BL Class runs throughout South Australia on both Standard and broad gauge lines, and into Western Australia, Victoria and New South Wales, on regular "through working" operations.

V/LINE Mk2 G CLASS (G2)

P221 - SINGLE MOTOR P222 - DUAL MOTOR



G2's run on the Broad Gauge in Victoria and SA, & the Standard Gauge in Victoria and NSW. Note differences between G2 and G1 such as roof mounted air-conditioners, MU Cables & Step locations.

TO INCLUDE



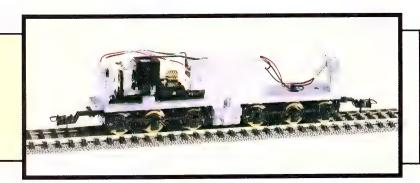


GENERAL PURPOSE LOCOMOTIVES



A NEW MECHANISM DESIGNED FOR SMOOTH POWER AT LOW SPEED.

Suitable for all light freight and passenger operations, on both main and branchlines. Ideal for shunting - just like the prototype.



NEW FOR 1990 Auto an Agricon

AUSTRALIAN NATIONAL 830 CLASS

Late 1990 release as:
P237 - AN Green/Yellow
(2 numbers)
P236 -TASRAIL Green/Yellow
(Not Illustrated)

All photos on this page depict hand painted pre--production models. Reverse Livery 48 Class and AN 830 Class courtesy of-Platform One, Fairy Meadow NSW.







NSW COACHES IN TUSCAN & RUSSET LIVERY



P403 MHO Passenger Brake P400 FS Second Class

P401 BS First Class

PARCEL & MAIL VANS



P444 - KB Parcel Van - Cand

BUFFET CARS



P422 BSR - Tuscan (Standard Livery) P402 BSR - Tuscan & Russet (Preserved Livery)



NSW COACHES IN CANDY LIVERY



P443 MHO Passenger Brake

P440 FS Economy Class

P441 BS Economy (Ex-First) Class

POWERLINE COACHI FOR RANGE, VARI

- Popular Australian proto geographical and histor
- Precise, accurately deta
- High quality paint and p
- Underchassis detail sho reservoirs, etc.
- Free-running bogies with and plated metal wheels

If you require KADEE cou fitting instructions supplie Coaches, simply add "K" to orderii



NSW COACHES IN TUSCAN LIVERY



P423 MHO Passenger Brake P420 FS Second Class

P421 BS First Class



- KB Mail Van - Tuscan

P442 LIV1865 LABORATORY INSPECTION VEHICLE

An unusual prototype that travels all over NSW and has also ventured into South Australia and Victoria on trials (Limited Availability)





AUSTRALIAN NATIONAL COACHES

These ex-NSW Cars were purchased by AN in the 1970's, during the building of the Standard Gauge line to Alice Springs, and are still in use.

P461 BC (Ex-BS) Coach P460 BD (Ex-FS) Coach

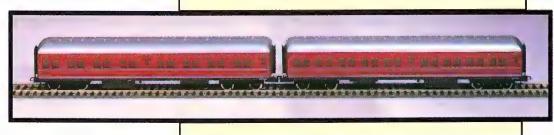


TY & ACCURACY

pes, suitable for wide I settings I body mouldings. ting finishes ng battery boxes, air

compact" couplings

ngs, mountings and with your Powerline ne part number when





V/LINE COACHES

Starting late 1990 Powerline will be releasing a series of V/Line Passenger Cars covering the period from the original broad gauge "Spirit of Progress" of the 1930's right up to the present day. Types have been carefully selected to cater for both Broad and Standard Gauge operations.



ECONOMY FREIGHT

GRAIN HOPPER WAGON



P600 - Manildra Starches

HOPPER WAGONS



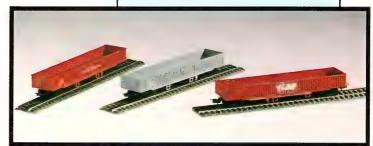
P611 - BHP Hopper P610 - Australian Iron & Steel



CONTAINER WAGONS

P627 - V/LINE RACE
P626 - QR RACE
P624 - SRA RACE
P625 - ANR Insulated
Plus four NEW Liveries to be released during 1990

GONDOLAS



P670 - VR Livery P672 - SAR Grey Livery P671 - V/Line Livery

SINGLE-DOME TANKERS



SHORT HOPPER WAGONS



P660 - AN Green/Yellow P662 - SAR Grey P664- Roof to Suit P660/P662 (Not Illustrated)

SCALE FREIGHT



NSW BRAKE VAN

The Powerline MHG/NVMF Van is modelled on a popular and widely used prototype.

P500 - MHG - NSWGR Black P501 - MHG - NSWR Tuscan Not Illustrated:

P502 - NVMF - SRA Tuscan

P503 - SRA Works Van

P504 - L550 Lab Test Van



FLASHING TAIL-LAMPS

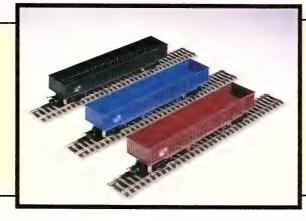
Most freight trains throughout Australia no longer have a guards van. Instead they have a "BOG" - a "Battery Operated Guard" - in the form of a red flashing light, just above the coupling on the last vehicle in the train. Powerline now has its own "BOG" in the form of a NOBX gondola with containers (a common load for these wagons) concealing the special flasher unit and battery holder.

P519 - NOBX/Containers/BOG

P518 - NOBX/Containers/No BOG

P930 - BOG Module Only





BDX/NOBX GONDOLA

Although based in NSW, this bogie open wagon travels throughout Australia on the Standard Gauge lines and because it is also suitable for bogie exchange, it can also find its way onto the Broad Gauge systems of Victoria and South Australia.

P510 - BDX - NSWGR Black Livery P511- NOBX - PTC/SRA Blue Livery P512 - NOBX - SRA Red Livery

SPARE PARTS

A wide range of spare parts and accessories are available, including:

- Level Crossing Klts
- Packs of Containers
- Packs of Couplings
- Metal Wheels
- Power Bogie Conversion Kits (to convert single motor "Heavy Haulage" locos to dual motor)
- Electrical & Scenic Items

POWER FOR YOUR POWERLINE

Powerline Controllers are made to suit Powerline and other popular brands of trains.

P901 - Controller

P902 - Inertia Controller

P910 - Transformer

P920 - Capacitor Discharge Unit for Point Motors









TRAINSETS

Powerline Trainsets are available all year round, and unlike many other brands include premium quality components. Passenger sets include Powerline Coaches, while Freight sets may include a mixture of Powerline and Freightline stock. Rust-free Nickel Silver track is included, as well as a good basic transformer/controller. Also featured is the Powerline Trainset Handbook which include basic instructions, trackplans and many other tips for the new Model Railway Hobbyist. Also unlike most other brands, Powerline Trainsets come in a sturdy and attractive carton designed for continued use and to last longer than just the one day.



AUSTRALIAN COLLECTION

For collectors and modellers who already have a layout and therefore may not need the extra track and transformers, Powerline also have a series of "Australian Collection" packs. These feature coaches or freight with or without locomotives, and once again use only the best Powerline and Freightline products in a sturdy and attractive box.

PROJECTED RELEASES

The following products are planned for release in the 1991/92 period:

- NSWGR C36 Steam Locomotive
- A New Diesel Locomotive
- Additional Scale Freight vehicles

(c) 1990 Powerline Models Pty Limited
 Colours and detail specifications may vary from those illustrated in this document.

Trade Enquiries to:
POWERLINE MODELS PTY LIMITED,
PO Box 264, PENRITH, NSW 2750
Phone: 047 215 915 FAX: 047 396 260
Also available to the trade via: Railco (Brisbane) 07 269 8127

TAKE OUTS AND PICK UPS

Phil Curnow describes the South Australian Railways' light goods traffic.

In the December 89 issue, Ron Cunningham detailed the smallgoods system known in NSW as 'Out-ofs'. Probably all railways would have something similar and on South Australian Railways this traffic was handled in a Take Out or a Pick Up van. Obviously the difference between them was the Take Out van began with the load on board while the Pick Up began as an empty. For the sake of this article we'll refer to them as TO and PU vans.

My introduction to the TO van was on a freight train tour to Clare in the mid 1960s. At one of the unattended stations the fireman came back to help the guard unload a small mountain of groceries for the local store. To their sorrow they also found a keg of beer which should have been unloaded earlier. We eventually unloaded the keg on the return trip.

To find out the operating rules for TO and PU vans, I turned to the

To find out the operating rules for TO and PU vans, I turned to the SAR General Appendix and to a freight schedule book for 1970. One thing is certain, the SAR thrived on paperwork and the guard needed plenty of carbon copying paper when doing TO work on a wayside train.

The Outward Goods loading shed at Mile End prepared the TO van and sealed the door with a Brookes Twist Lock wire seal. The waybill card listed the stations in sequence and how many packages were to be unloaded. The shunters assembled the train usually in station order, although there could be variations if it made shunting easier. The TO van was usually near the engine but on the return the van, now a PU, would be against the brakevan. When calculating the train load, the starting gross of the TO van was used and this was not altered at each station unless more than a ton was removed.

There could be more than one TO van on the train. Mile End and Port Adelaide Goods Sheds could both prepare a TO van for the same train. When the number of packages was expected to be large, the trip could be split into two parts with a separate TO van for each. When emptied, the first van was often taken through to the destination as an empty.

At the first station the Guard would break the door seal and unload the packages then write all the relevant information onto his train sheets. Usually about four or five minutes were allowed for TO work. The door was to be resealed either at the last manned station prior to the destination or else immediately on arrival. The train crew did not have new door seals. The Guard handed over the paperwork to the SM who returned it to Adelaide.

The railfan was often unaware of TO traffic even while watching the Guard slide the door open, unload a few packages, then slam the door again. He then carried the packages to the storage area which varied considerably. For example, at Penola they went into the Porter's Room, into the Telephone cabinet at Lyndoch (1970 when the Station Agent was not in attendance), and at Dorrien (unattended station) they were to be left under the station office verandah. At Currency Creek (unattended, Victor Harbour line) the Appendix says they were not to be unloaded at the passenger platform but must be in the freight shed if entitled to secure storage or else on the ground. In years past there was obviously less risk of pilfering, especially in the country.

The TO and PU vans were usually a louvre style (four wheel DWF and bogie D classes), but in the summer months an Insulated Van (four wheel K and R and bogie RB classes) were used for perishable traffic such as milk, fruit and plants. The origin of this was the Cool Chamber traffic which was a feature of weekly notices in the early 1900s. The name stuck, even after the ice cooled K and later the R vans arrived.

Very little use appears to have been made of the guard's van freight compartment in later years, especially after the vans stopped going through the goods inwards and outwards sheds. Guards were instructed in 1970 not to load PUs for stations beyond Mile End into the brakevan. The exception was if the usual van was already full and then they had to advise Train Control to arrange for the brake to be unloaded and the goods transferred. Another type of vehicle to miss the Inwards shed was the Empty Returns. This was often on the wayside train marshalled next to the PU van. It was used for bottles, kegs, etc. but not cardboard cartons, biscuit tins, bags or gas bottles.

What went into the TO van? We've already mentioned groceries,

What went into the TO van? We've already mentioned groceries, kegs, milk, plants and other perishables. Others were cartons of eggs, hampers of pigeons (to be released en route) and cartons of young chickens. There were special instructions to allow the chicks to breathe. I remember watching the train crew unload a dressing table then debate what to do about the broken mirror. More paperwork!

The Appendix lists the devices available to help the crew unload heavy packages of up to one ton. There is a wordy description of how to attach a winch to a ½" hole above the door of the M and D vans. A set of rollers was available also, as were special brackets to hold long lengths of conduits against the side walls of louvre vans. All of these had to be obtained from the Outwards Shed if required and signed for, I guess.

One of the more interesting TO runs was the Monday, Wednesday and Friday 'Produce' which left Mile End at 2.15pm for Broken Hill. The loading was transferred at Peterborough to standard or narrow gauge vans back in 1970. In keeping with the other loading on the produce, the TO traffic allowed was perishables only.

The goods that went into the TO and PU vans is much more easily carried nowadays by road truck so this is rapidly becoming another

railway operating practice that occurs only on a model layout.

As an example of how a freight train was marshalled before it left Mile End yard, let's look at No. 863 (7.45pm) to Port Pirie, Monday to Friday in 1970.

- Engine
- Port Pirie Take Out truck
- Lake View
- Redhill
- Merriton
- Wandearah
- Nurom
- Snowtown
- CondowieGladstone Take Out truck
- Georgetown
- Gulnare
- Yacka
- Brinkworth
- Gladstone and beyond
- · Port Pirie and beyond
- Brakevan

Stations Snowtown

to Port Pirie.

Stations on Gladstone line. Detached at Snowtown for No.113 Tuesday, Thursday & Saturdfay

Note that loading for stations prior to Snowtown is not attached to this train. This went on the 10.50pm from Mile End. Snowtown is the junction for the Gladstone line and also to Wallaroo via Barunga Gap. There was not a separate train from Mile End to Gladstone but No.113 began at Snowtown three days a week.

The reason for the emphasis on station order is to simplify shunting and therefore reduce time. All the wagons to be set out are near the engine so the time spent going past a switch then reversing into a siding is reduced. Wagons added to the train were usually placed with others for the same destination.

'Port Pirie and beyond' usually meant loading for Western Australia that required bogie exchange at Pirie. Usually this was the majority of the load on this train which could build up to 1600 tons on the ruling grade near Nantawarra with a single 930 class Alco.

Merriton, Wandearah and Nurom were closed when the standard gauge to Adelaide was re-routed via Crystal Brook. The broad gauge to Gladstone has been cut back to Gulnare so this train is now just a memory. Enough history!

May I also refer readers to Des McAuliffe's letter on this topic in the February 1990 issue.

	A.N.	GL86A
UR	GEN	T
TAKE O		AGON
Wagon No.	0 1, 10	//19
Tragon Ito:	tonnes	kg
Mass of Contents		
Gross Mass of Wagon		
From		STATION
To	Station	Packages
***	, , , , , , , , , , , , , , , , , , , ,	, , ,
,,, ,, , , , , , , , , , , , , , , , , ,		
, , , ,		,
,		
***	37	"

,,	,,	
A.N. Sheets	Ropes	
VIC. Sheets	Ropes	

BRANCHLINE Ramblings with Ron Cunningham

A MATTER OF DETAIL

Paul Berntsen's editorial appearing in the October issue of AMRM which asked the question 'What is finescale?' touched on several matters which have often been discussed at length by the Friday-Night Ramblers

His first definition of 'finescale' as being a set of standards such as Protofour or Proto-48 which more closely approaches scaled down prototype standards than, say, NMRA or AMRA standards would get no argument from the Ramblers. You might be able to get a discussion going over the relative merits of one set of standards over another but even here most of the Ramblers are content to run RP25 wheels on Peco or Shinohara track.

However, his second definition of 'finescale' as being a state of mind in which the level of detail applied to one's modelling determines whether it is 'finescale' or not really re-opened a lot of old arguments that the Ramblers had been involved in. Again, these discussions were not over Paul's actual definition although I prefer to reserve the term 'finescale' for use in connection with scale standards and to use a term such as 'super- detailing' to describe highly detailed modelling.

No, what the Friday-night Ramblers usually argue about is the relative importance of detail in modelling and these arguments usually start as a result of one of the operating sessions on Werris Creek. The reason for this is quite simple. Werris Creek with its staging yards at both ends now complete can, in a normal operating session, easily handle over a dozen different trains. The only problem is that, even after modelling the NSWGR for twenty years, I do not have sufficient locomotives and rollingstock available to make up that many trains.

Don't get me wrong; like most modellers I have a cupboard full of unassembled kits and a cabinet full of half completed rollingstock. (Jennifer, my wife, says that I should open a hobby shop because I already have enough stock for at least the first year.)

In fact, over the years as I developed the concept for what would eventually become Werris Creek I gradually purchased the rollingstock, both passenger and freight and the locomotives that I felt would be needed when I finally commenced construction of my model railway. (When I finally settled on the Werris Creek concept I actually sold some locomotives which did not fit the concept.) As a consequence I have enough locos and rollingstock for Werris Creek. The only problem is that a large number of them are still in their boxes or plastic bags awaiting assembly or other work before they can be placed on the layout.

"What have all these half finished and unassembled kits got to do with arguments over detail?" I hear you ask.

Well, actually there used to be a direct connection. You see, one of the aspects of this hobby which I enjoy most is the building and detailing of structures and rollingstock, either from kits or from scratch. Add to this the fact that the 'Friday-night Ramblers' include amongst their ranks some of the most highly respected modellers in this country and you will understand my determination that the 300 odd items of rollingstock needed on Werris Creek would all be detailed and finished to the highest standard.

That this determination was creating a major problem on Werris Creek was brought home again after a recent operating session when the desperate shortage of rollingstock had again become patently

At the usual post-operating session discussion Chris, one of the Ramblers, happened to mention that it took him on average about one week of modelling time to assemble and detail each item of rollingstock for his model railway. Chris is one of those modellers who super-details every item which is to go on his layout, be it rollingstock, structures or scenery, an attitude to detail that I had been determined to match on Werris Creek.

However, Chris is building an up-country branchline which can be operated with two or three locomotives and twenty or thirty items of rollingstock. Werris Creek for a full operating session will require thirty locos and over three hundred items of rollingstock. To finish that many items to Chris's level of detail at the rate of one per week would take about six years, provided I didn't do any other modelling at the same time.

I suspected that the Ramblers might revolt if all progress on Werris Creek was halted for six years whilst I assembled and detailed rollingstock so another approach was clearly required.

One that was tried occurred when several of the Friday-night Ramblers, including myself, sat down one evening with the intention of bringing some of my stored rollingstock up to a standard where it could be run on the Creek.

At first I was not all that enthusiastic over this approach but I gradually

warmed to the idea of having the Ramblers assembling my rollingstock. Visions of endless rakes of highly detailed, totally complete coaches and wagons rolling over Werris Creek began passing through my mind. I was convinced and in we plunged.

These were indeed noble intentions and some useful progress was in fact made. However, it was a case of two steps forward, one step back when one of the Ramblers demonstrated how to totally destroy in less than ten seconds, one of the bogies from under a Powerline coach. A replacement bogie was quickly obtained from a hobbystore without too much of a dent in my modelling budget for the week but the episode did place a damper on this approach to solving the rollingstock shortage.

It was whilst considering another problem which had become evident that a further approach suggested itself. This other problem concerned the detail on the items of rollingstock that were complete or, to be more accurate, the disappearance of such detail. These items were usually pieces that had been completed before construction of Werris Creek began when time was available for superdetailing. The detail on these items was clearly suffering from the wear and tear and unavoidable knocks which are part and parcel of heavy operation.

I found myself asking the question, what is a reasonable level of detail to put on a model and still expect it to survive the rigours of frequent, heavy operation?

Before I could come to terms with this question, whilst I was examining the drawers full of half completed rollingstock in my modelling cupboard, a third problem relating to detail suggested itself. Many of the half completed items had their progress towards completion halted because I lacked the necessary information to accurately complete the model. It may only have been the size of the air cylinder or the exact placement of some detail or other but it was sufficient for me to halt work on that item until the necessary information was obtained. This in most cases was never, and hence the fifty or so half completed items in the cupboard.

When considering this dilemma I realised that some top modellers did not have this problem. Their approach was, if the size of a particular item, be it the height of a door or the spacing between windows, be in question, than an educated guess was all that was necessary to obtain the required measurement. This often results in models which would not pass the scale ruler test. This approach to detail can be summarised as. 'If it looks right then it is right and to hell with the rivet counters.' I have seen many fine models which fall into this category, which I call 'modeling for effect'

Well, my ramblings on detail have now led up several different tracks so let's restate the three basic conflicts encountered.

- i Detail vs. quantity: Given that time is a main limiting factor on our modelling output, it may be necessary to compromise on detail to achieve quantity. I have now certainly come to this opinion in regard to Werris Creek. In future my aim will be to bring rollingstock quickly to a level where it can be painted and weathered and issued for revenue service. I intend, at some later date to come back and add whatever detail I think is needed.
- ii Detail vs. durability: Not an easy one, this one, but I have certainly come to the view that it is not practical to detail every model as if it is intended to be entered in a modelling competition. The effects of frequent operation require a certain ruggedness of detail. Just what this level of detail is that will stand up under constant operation is I do not know at this stage; only time and experience will tell.
- iii Accuracy vs. looks right: This is really a philosophical problem relating to one's attitudes to modelling. (Okay, let's hear from all you armchair, philosopher modellers out there of which I know there are plenty.) As much as I try I cannot break out of the accuracy group so to all of you authors out there I say, "Keep your articles coming in, you may have just the information I need to finish half my rollingstock".

In summary then, I seem to remember reading somewhere about a modeller who used a term something like 'layout standard' or 'operating quality' to describe his level of modelling. I rather like the term 'operating standard' because it implies a level of modelling detail which is related to the demands of time and the requirements for ruggedness which the operation of a model railway entails. At the same time it allows all of us to make our own decisions as to exactly where we stand in the abovementioned trade-offs.

Now that I have finally sorted out where I stand on these complex issues perhaps I will be able to get around to finishing some rollingstock for Werris Creek. Does anyone happen to know what the size of the boards on the ends of MLK's was as originally built?



BRITISH COLONIAL YANKEE

by Frank Kelly

What a title for a locomotive. But that is exactly what the prototype was. These S class locos soon earned the nickname of 'Bastard Yanks', unprintable in 1882 but now accepted. Has our moral standard lowered since 1882? Perhaps so. In 1879 the Victorian Railways imported from the Baldwin Locomotive Works two 4-6-0 freight locos that were to become the W class. The years 1881 and 1882 saw the construction of the slightly smaller S class by the Phoenix Foundry of Ballarat, Victoria. Although the S class looked an American loco, it had several British features; a dart to secure the smokebox door, pushover regulator, steam

dome cover, safety valves, etc. In 1884 more Baldwin W class were purchased. The Phoenix Foundry construction methods and material came under question about this time. Suffice to say that the S class was extinct about 1904 and the last of its brothers, the Baldwin W, lasted until 1930.

The model S class is of my usual construction, with the tender articulated to the engine. The motor is in the tender with flywheel and floating tail shaft between tender and engine. As the front of the tender rests on the rear of the engine, the weight of the flywheel in the tender is available for traction on the drive wheels, giving it improved

running performance.

In recent years one of the greatest boons to the scratchbuilder has come on the market in the form of telescopic tube, both round and square. With a little thought, these tubes can be used for a variety of locomotive bits and pieces. The largest diameters can be used for boiler barrels, this of course being quite obvious.

The large oil headlight is fabricated out of 0.010" sheet brass. The top is filed out of the solid, but the polished brass lens rim is a slice off the correct size tube.

The small lamp on the headstock is made with three sizes of square tube to reproduce the steps



in the lamp top. A hole is drilled in the front and a round tube butt soldered, again to form the lens rim. A circle of fine fuse wire to form the carrying handle is then soldered over the top of the lamp funnel. You have to be quick with the soldering iron and have a steady hand. For ease of soldering, and handling, the pieces are soldered together in the long tube, i.e. the first tube step in the lamp top is soldered just inside the large outer tube, then sawn off to the correct height. The operation is then repeated for the smaller section or funnel top. When this is parted off the long tube the resultant small square hole is filled with solder. The hole is then drilled in the front of the lamp and the round tube is both soldered onto the lamp front again for ease of handling in the long tube, then parted off with the saw the desired ½mm or so to form the lens rim. The main square body is now parted off from the long tube and we have our finished lamp. A jewel as

a lens looks terrible. More convincing is round perspex rod filed convex on the end and fitted into the hole in the lamp front. When filed, perspex assumes that translucent milky appearance typical of these oil lamps

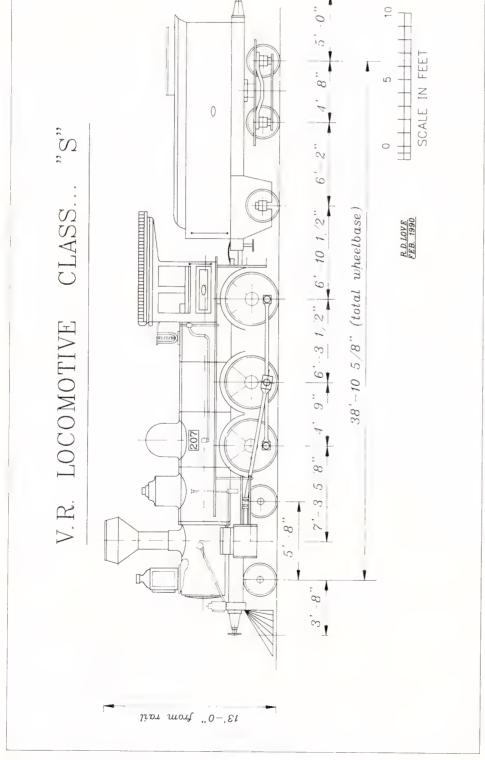
Funnels are easily made out of this tube. A simple funnel such as the South Australian Railways RX loco stove pipe (the prototype was probably a piece of cast iron water pipe), is just a slice off the correct size tube with wire soldered around the top for the bead. The spark-arresting funnel has been fabricated out of 0.005" an nealed brass sheet. It is a simple matter to plot the shape on the brass sheet. We were all taught at school that 22/7 x diameter = circumference. With this knowledge, it is easy to plot around the circles and arrive at accurate shapes to roll into the two cones - see the drawing. The base and straight part of the funnel are two tubes. The short piece of tube or outer is turned in the lathe

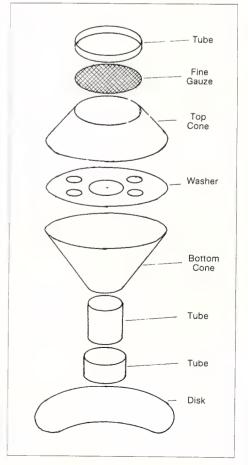
to the required taper, leaving a small step at the junction of the main tube. The base is carefully filed to fit the smokebox and a disk of 0.010 brass curved to the smokebox circumference. A fillet of solder forms the curves to this brass disc. A 0.010" brass washer forms the junction of the two cones and gives that small flat, as on the prototype. This washer also has to have a few holes drilled in it so as not to trap any cleaning fluid used before painting. Fine petrol gauze is soldered inside the top cone and the top rim is again a slice of the correct size brass tube.

For colour separation when painting, the sand dome was made in three pieces. The middle or painted bit, again a piece of our famous tube, was sandwiched between two turnings and held by one screw from inside the boiler tube. Again for colour separation, the boiler unit is keved to the cab and held in place by one screw. This screw is hidden by the backhead. All of the brightwork to represent polished brass on the prototype was plated guilt gold; parts such as rods that are steel were plated satin chrome.

Now for a colour scheme. History fails us here. We have enough information on this Phoenix S class, as well as a lot of other early Victorian Railway locos, to build a full sized working duplicate. They recorded everything; what size crown stays were used, etc. etc., but they never recorded the shades of green that were used. How frustrating to the historian and model maker. Some years ago I had the privilege of assisting Norman Cave and Harold Friedman, our Government artist, with the mural of transport above the arrival and destination board at Spencer St Station. The two-tone greens that we decided upon as what were VR colours for locomotives up to about 1906, are represented by Floquil Dark Green (BR441, SR Loco Green) and Light Green (BR442, LNER Loco Green) This S class was an odd one when new. A careful study of existing photos (one is included with this article) shows the green to be much lighter, almost a yellow, say Apple Green, with wheels and tender tank trim Dark Engine Green or, as they say in Queensland, 'invisible green' - almost a black. It was a prototype with a lot of character and had to be modelled.

Artwork was done for the plates by taking





Page 52. Australian MODEL RAILWAY Magazine. April 1990.



New S No.207 just fresh from Phoenix Foundry The tones of this photograph suggest that the boiler cladding was a very light Apple Green, perhaps even yellow, wheels Dark Green, frame Indian Red, cab brown polished wood. These driving wheels are only 4' in diameter. Are we growing taller or are these men very small in this photograph? Photo by courtesy of V/Line.

paper rubbings off existing numbers at the Newport Railway Museum. These were reduced using a litho camera and positives were made the correct size, then etched in 0.010" brass; the same process as etching printed circuit boards.

It was a shame to fit autocouplers to this model as the prototype had draw hook and screw coupling. However, as in later prototypes, the autocoupler can swivel aside and the screw coupling can be used.

As was the prototype, the model also is Cosmopolitan; the pony wheels are English, the driving wheels came from America, the tender wheels are New Zealand made and the motor is from Japan.

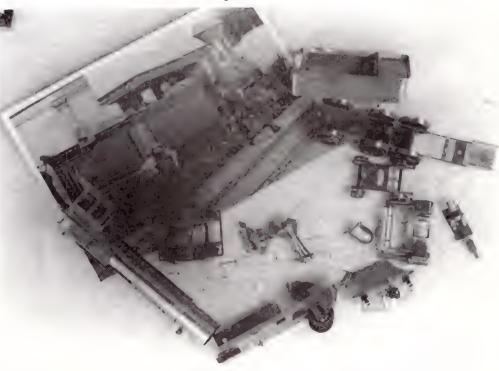
Other Locomotive Articles by Frank Kelly include:

D. Della and Land	Issue No.
Building a Loco	74,75
SAR RX Class Locomotive	109
Track, The	101
VR A2 Class	72
VR Class A Loco	82
VR Class N Locomotive	85
VR Class P	74
VR Class W	71
VR DD Class	88
VR Engine No.100	93
VR Locomotive Class O	77
VR Rogers D Class	78
VR V Class Compound 2-8-0	92

Shown in this photograph are several sub- assemblies. What I had was a home-made kit of parts to be soldered together - first time I have ever done this. The normal thing is to make the parts and then fit before going on to the next part. As can be seen, the funnel is there with other parts. The funnel is the subject of the text of this article.



The above photograph shows the standard drive general arrangement. A machined lead flywheel is attached to the armature shaft and a tail shaft drives through to the engine. The tender rests on the rear of the engine. The front fixed axle of the tender floats and is held down on the road by a spring. The prototype was fitted with this odd six wheel tender, a bogie and one fixed axle, so engine and tender would fit on the then existing small turntables.





An SAR 930, in the full glory of the original red and silver livery, hauls a block load of empty O wagons gingerly down the branch to the Pyrites mine. "If only you'd been here last week - there was a 500 on it last week!" A scene on the South Australian layout of John Gordon, last seen in these pages in the February 1988 issue.

LINESIDE

with James McInerney.

Fresh paint gleaming, brand new SAR 930 and 830 class locos stand at the head of a goods waiting to cross a brace of Brill class 75 railcars on an opposing passenger. As is usual in South Australia, there is no-one around except for the train crew, so the very late running passenger will be able to regain a few minutes with some smart station work. A scene at Rodwell Creek on John Gordon's layout in Adelaide.



Page 54. Australian MODEL RAILWAY Magazine. April 1990.

UNING THE AR 45



The arrival of the HO scale AR Kit Co. NSW SRA 45 Class in December 1989 was warmly received by all modellers and is a model that readily fills a gap in the available ready to run diesel fleet.

It is a very fine model, that is extremely accurate and an excellent performer and, for those so inclined, a foundation upon which to base a super-detailed model.

As with any mass-produced model the world over, modifications can be made to improve its appearance and performance. This equally applies to the 45.

AMRM has collected a few pointers from a number of experienced modellers to assist those who may be hesitant in working on the AR 45 class

The first and most important factor is to read and understand the instruction sheet which accompanied the model. Although some hints in this article will both duplicate and offer alternatives to the instructions, the manufacturer's words are very important. After all, he did design the model,

and the printed instructions pass on the design viewpoints.

The tuning of the model can be divided into sub-sections:- basic body, coupler modification, mechanism tuning and repainting.

Body DetailingIt is important to note that this article is not aiming to modify the existing body, except for repainting. This will be covered in future AMRM articles.

While it should not be necessary to remove the body from the mechanism for detailing of the body shell, a circumstance may occur requiring its removal, which should be done with great care.

Turn the body upside down and ease inwards the lugs clipping onto the footplate with a screwdriver. There are 8 lugs which, when opened out, allow the body to slip off the underframe. Take great care not to break the clips.

Likewise, also take extreme care when replacing the body. It could also be wise to strengthen the body shell, details will be supplied later.

Handrails

Fitting the handrails is quite simple as long as the instructions are followed. However, before fitting, it is important to check that all handrail holes in the body moulding are fully pierced. If any are partly closed, push them open with a very fine point. Do not drill out the holes on the locomotive body. It is very important to retain the press fit of the handrails into the body. It may be necessary to trim some flash from the press-in sprue. When normally fitted these will not need any glue to hold them in place, but if problems occur, secure with superglue from the inside of the body.

With the handrails that are fixed into the cab side and onto the footplate, do not glue every joint. Leave the joint into the cab free, otherwise it will not be possible to take the model apart.

End Handrails and MU Stands

Problems will be incurred in fitting the end handrails and multiple unit (MU) stands. The mounting lugs have a D section, while the holes are circular. File the lugs so they are circular, checking constantly that they remain a press fit into the mounting holes on the footplate.

If the base of the stanchions does not sit down on the deck, reduce the length of the mounting sprue and check the depth of the hole in the footplate. If too shallow, increase the depth of the hole in the deck.

When fitted in place, secure with Superglue.

Step Handrails

Like the handrail/MU stand, the moulding sprue needs to be rounded off. Check the mounting hole. If too shallow, drill out with a No.62 drill. When handrails are securely in place, secure with superglue.

Rear Vision Mirrors

Before fitting the rear vision mirrors, decide which direction the model is to be running, and add the mirrors accordingly. The mirror folded against the body is the trailing end. Secure these in place with superglue.



Allan Brown's models of 4520 and 4529, illustrate what can be achieved with the AR Kit Co. 45 class. Allan used the detailing processes described in the article and weathered them as per his 'Weathering Diesels' article in issue No. 127.

Headlamps, Marker Lamps and Number Boxes

The remaining detail is easy to fit by following the instructions.

The marker lamps, headlight and number box lenses are easy to fit but must be secured in place with MEK or other liquid styrene solvent. If the number box lens projects from the frame, file off at the rear before securing in place. Note that they can only be fitted one way. Add the black road numbers as desired.

For good effect, the headlight and marker lamps may be replaced with jewels. The Australian produced J&C 6" (headlamp) and 3" (marker lamps) jewels are suitable as are the MV Lens range, LS22 for the headlamp and LS300 for the marker lamps.

Dual Marker Lamps

As supplied, the model is designed to accept the single marker lamp. A dual marker lamp is supplied as a clear moulding and the manufacturer's instructions cover their placement. The single lamp mouldings must be cut away to allow this moulding to sit flush against the body. It may also be necessary to enlarge the retaining pin hole.

Buffing Plate

If using the model for the mid 1980s period and retaining the buffing plate, the side edges should be painted Traffic Yellow.

With the removal of the buffing plate the four bolt holes each side remained.

Exhausts and Other Details

The kit provides for two exhausts, the oval style and the venturi tapered style. The oval style should be used for the current day with the tapered style used for the 1960-1970 period.

It should also be noted that the AR 45 follows the 45 as originally built.

Some locomotives had the air intake filters changed from the soaked oil style to the replaceable fibreglass type. This changed the appearance of the long hood on these models. AMRM is currently listing those that have been changed and seek assistance from readers on this matter.

Air hoses should be added to suit requirements.

With the introduction of the 35 class, further modifications have been applied since Bob Cooke's article in the December issue. The cab roof of most 35 class now have a number of steel stiffeners applied to the exterior of the roof.

Elongate holes to accommodate pins increase all on plastic sideframes hole sizes to 1/16 PLASTIC SIDEFRAME Sweat wires to Inside of frames (From Inside) KEEPER PLATE (End View) Shorten plastic BRASS SIDEFRAME pins by 1/16 (From Inside) Diagram 1 - Bogie Narrowing

Body Strengthening

As supplied, the front and rear hoods are united by a fine section of plastic moulding through the inside of the cab. It is suggested that this panel be strengthened with a 0.020" piece of styrene cut to 9mm x 42mm. Glue in place, inside the body shell with the bottom edge common to that of the hoods.

Don't make it too high or it will impair the locking tabs on the cab, next to the doors.

Couplers

Although fitted with the European style coupler, many modellers will wish to change these to the more popular and prototypically accurate Kadees. In doing so a long shank style is necessary.

For good operation with the 45, the extended shank Kadee No.26s should be used. These require the use of a No.5 box and spring. They should be secured in place mechanically, with a screw.

Tuning the Mechanism

With any model, especially a locomotive, it is important for the owner to understand the maintenance requirements as well as its design so that it can be tuned for the best performance possible. All mass produced models have a problem or two that will prohibit the model from working at its best. It is wise to check all these points on any model before introduction to the layout.

The AR 45 has a very fine mechanism, which was fully designed and manufactured in Australia. While following the engineering lines of both Athearn and Kato mechanisms, it has some of its own special features.

The following sections describe in detail what is required to get top performance!

Back to Back

With any new model it is wise to check the wheel back-to-back dimen-

sions. This is best done with an NMRA RP25 checkgauge which is an essential tool for the modeller.

The wheel sets on the 45 are mounted on Delrin type axles. Check for flash and burrs if the dimension is out. Remove any infringing material and superglue each wheel in place.

Pick-ups

The pick-ups on the 45 consist of brass plates which are positioned on the axle of each wheel, providing twelve wheel pick-up. A wire soldered onto each pick-up plate is connected to the motor/lighting wire loom. Make sure these wires are properly soldered and check that the plate is not restricting the free rotation of the wheels. While appearing a difficult task, it is not as daunting as it first appears. As an insurance policy - do not work on both bogies at once. Work on one while using the other as a guide for re-assembly.

First, remove the plastic sideframes which plug into the bogie. A small screwdriver will be of assistance. (With the sideframes removed it is now easy to add the brake cylinders.) Remove the keeper plate by levering the

retaining clip on the arrowed end with a small screwdriver.

Gently remove the pick-ups off the axles. They may be tight but care must be taken not to break the wire, etc. in this task. Open out each axle hole with a 1/16" drill. Slightly countersink each axle hole with 1/4" drill - just enough to remove any swarf (flash). This can be done without removing the pick-up wire.

Finally, check inside the arrowed end of the keeper plate for any burrs remaining from the moulding sprue. Remove with a sharp blade so that the inner surface is smooth. Before replacement of the keeper plate, check for lubrication. If dry, do not use oil, use AR grease lubricant which will be on the market soon. Labelle 106 is also suitable.

The free movement of the wheels can be checked by removing some of the spur gears, but it is just as easy to replace the keeper plate and

sideframes and test on the track. Unless there is a dry joint, in the fine tuning of the 45 there is no need to remove the wire from the pickup unless directed to.

Drive Shaft End Play

The drive shafts, unless correctly positioned can be a source of noise and running problems. The end play of the drive shafts must be 0.020" or 0.5mm. This must be measured when the wheels are on a flat surface and with the gear tower work pushed towards the motor. If too tight the problems will occur. If too slack the drive shafts may fall out when the model is picked up.

The problem can be corrected by moving the universal on the gear tower worm drive shaft. The universal can be pushed onto the shaft to increase the end play, or moved back along the shaft using two screw drivers as wedges, pliers or scissors behind the end of the plastic body.

Bogie Narrowing

It is possible to move the plastic sideframes inward, to butt up to the

brass pick-up plate.

Remove the plastic sideframes and the keeper plate. Insert a sharp craft knife vertically behind the four outriggers on the keeper plate and cut down and off. This was the physical barrier stopping the sideframes from butting up to the pick-up plate.

Remove 1/16" from the two pins on the inside of the sideframes. (We've

shortened the hole so we must shorten the pins.)

Unsweat the wires from the pick-up plates. Elongate, towards each other, the two holes in the brass pickup plate through which the sideframe retaining lugs pass. The distance between these holes and the pins is not the same, and unless the holes are elongated the sideframes will bow.

If the sideframe touches the axles, check that the pickup plate hole elongations are clear, and if necessary increase the elongation of the axle-hole that is already elongated in the sideframes.

Solder the wire back onto the inside of the pickup plate.

Complete the task by reassembling all components. Refer to Diagram 1 for further assistance.

Gear Tuning

If the model is still slow or noisy, inspection of the gears and the mechanism will be necessary. As this is not a task for the faint-hearted, patience and care are must be exercised.

Repeating the earlier warning - do not work on both bogies at once. Work on one while using the other as a guide for re- assembly.

To inspect the gears the mechanism will have to be disassembled

commencing with the sideframes, pickup plate and keeper plate. Remove axles and wheels from their individual locations. Some gearshafts may have evidence of flash which must be removed. A sharp blade will suffice.

With the axles removed, check the idler gears for smoothness in turning. If tight, the bogie must be completely disassembled by removing the retaining clip with a screwdriver and then removing the retaining screw. Each gear must be checked for burrs on the teeth and flash on the axleshafts. Also look for flash on axle the holes inside the frames. They may need to be opened out slightly. Take care when assembling.

Gear Teeth

If a gear shaft or axle is bent or does not run true, it should be replaced. This would be an extreme case and you should refer this matter back to where you bought your model from.

Re-painting the 45 Class

The 45 class has been moulded in its respective colours. If unhappy with this finish the models can be repainted with off the shelf colours. We don't question the accuracy of the colours of the model as bought but some customising can be done to produce a unique model. However, if you do this, we strongly suggest repainting using either an air brush or spray gun. Using the colours suggested will produce a finish as good as supplied from

To remove the linework and numbers, soak the body in Shell Heavy Duty brake fluid or Floquil Barrier Thinners. Beware, other brands may harm the surface of the model. When clean, wash the body a number of times in water and detergent, then rinse thoroughly and leave to dry. The body can

now be redetailed with lining and numbers or repainted.

If repainting the body give it a good base for the finish with a sprayed coat of Floquil Primer (Grey). For the red terror or candy livery, spray with Floquil Caboose Red. Spray with Scalecoat Tuscan for the Indian Red style while Scalecoat Red Oxide is a close approximation for the Tuscan Red livery. Re- number and re-line with AMRI 45 class decals. The Silvermaz 48 class decals will have to be used for the side body line (Tuscan/Indian Red) because the AMRI set is incomplete.

The exhaust should be painted a rusty silver, the face of the MU sockets red (white on candy/red terror) while the undergear should be weathered

black.

SAR 600 Class

While the AR Kit Co. SAR/AN 600 class is different to the 45 class it is not a dead accurate model. A special article is being prepared on modifying the AR model to a current version AN 600 class and this will be run with a prototype article on these popular locomotives. If requiring a dead accurate 600, it may be best to wait for this article which is due later this year. In the meantime some minor modifications follow.

Body and Mechanism

The mechanism is identical for both models, so those detailed for the

45 class apply to the 600.

The front handrails/MU stands are not correct and require major reworking. The buffer hole in the pilot should be filled with body filler. If repainting, the staff exchanger hole should be filled. MU and air hoses should be added to suit requirements.

Painting

If repainting, follow the procedure for the 45 class plus blocking in the staff exchangers

For Mustard Pot livery spray Floquil D&RGW Yellow, with Floquil Tuscan for the roof and centre band. The body handrails are black, the front handrails and bogie sideframes silver and the fuel tank black.

The maroon and silver livery is a mixture of Floquil Caboose Red with a touch of Tuscan for darkening. Alternatively use Broad Gauge Models' VR Carriage Red with just one drop of VR Blue for darkening. Floquil Platinum Mist is ideal for the silver band and roof, bogies and wheels. The fuel tank and handrails are black, while the pilot is maroon with a silver V.

Watch your brand of paints, though. Remember that you can spray

enamel over lacquer, but not lacquer over enamel. For modelling purposes enamels are Humbrol, Scalecoat and Craftsman, while the lacquer field includes Floquil and Dulux automotive lacquer.

The Future

Like all locomotives, there are many variations between individual 600 and 45 classes. AMRM will cater for some of these with a rebuilding of the 45 by the Brastic team and a 600 class update, the latter accompanied by a Pete Smith article on the 600 class. All are scheduled for 1990.

Acknowledgements

he AR Kit Co's 45/600 class locos are fine models. What we have described here however are tips for those modellers seeking to make their model just that little bit better. We thank the AR Kit Co. for giving us such a good model to base those modifications on.

This article has been made possible with the full cooperation and assistance of Rod James and the AR Kit Co. The participating modellers were Allan Brown, Ian Dunn, Graeme Pantlin, Steve McElroy, Graham Ball and the Ron Cunninghams (senior and junior).

REVIEWS

NSW SRA 442 and 45 Class Locomotive HO Scale Plans by Data Sheets, 12 Whalan Place, Kaleen, 2617. Price: \$4.00 per sheet.

The latest sheets from Data Sheets cover two of the workhorses of the modern day NSW SRA. Although introduced in 1962 (45 class) and 1971 (442 class) both classes are still in constant use by the SRA, a 442 being used to haul the Northern Tablelands Express, the Britans I inside and the Murrilliumbah Motor Rail the Brisbane Limited and the Murwillumbah Motor Rail in their last months of operation.

The 45 class has for some time now been used as a second unit only, this being rectified by the conversion of some to 35 class - see Bob Cooke's article in issue 159. The Data Sheet plan mentions this conversion but does not detail any of the minor changes to the cab roof during the 35 class upgrading. It does however provide elevations of both sides and ends as well as a fully detailed plan view, which also includes the layout of the cab. It also details the conversion to dual marker lamps, changes to the sand boxes, addition of Fletner vent and brake changes with a separate elevation of the front left side.

The text and side elevations are also used to detail the different exhausts, logos and lining (both Indian Red and Candy), buffing plates, cab windows and the air intake filters. The only question here is that all filter modified units sighted by this reviewer have been fully louvred, while the Data Sheet shows the top filter as a mesh finish. However, for those wishing to modify the AR 45, the additional filter location is shown, as is the strapping on the cab roof where the cab meets the long hood. Two photographs of 4501 complete the sheet.

The sheet on the Jumbo, or 442 class, follows the same layout as the 45 class with the mechanical and physical variations being detailed in the accompanying text. The elevations and end views detail the lining differences between the Indian Red and candy liveries and the cab layout is clearly shown. The only question about this sheet is a panel on the left side which is shown as a mesh type finish while the accompanying photograph shows it as a louvred finish. In reality this panel has vertical louvres behind the horizontal louvres.

the sheet showing it as a coarse mesh.

Regardless of these minor inconsistencies, both sheets are a welcome addition for the NSWR modeller and no doubt will be a help for the SAR modeller interested in the 600 and 700 classes - or does Data Sheets plan to cover these as separate sheets? Time will tell

Bob Gallagher

Large Scale Model Railway Journal, a Grey Feather Press publication. Distributed in Australia by Five Star Models, 37 Woodmason Road, Boronia, 3155. Price: \$6.95 a copy.

With the popularity and immense growth of large scale modelling, it was only a matter of time before another specialist magazine appeared on the market. Joining the LGB Magazine and Garden Railways Magazine, the publication caters for the larger scales, but in doing so varies from its compatriots. It is economically reproduced, using a plain matt paper, is spirally bound and, with 34 pages in the Premier Issue, covers some of the simpler aspects of modelling conversions, news, structure building - all the aspects that are essential for modelling.

A4 in size, the pages are enclosed by a gloss card cover and illustrations are black and white. Lettering is large, around ten points by local comparison. Its layout suggests it is compiled by a desk top publishing system, the modern way to go. The use of spiral binding permits regular purchasers to bind all magazines in a common spine

An interesting publication that will improve with

Bob Gallagher

'The Southern Aurora', publication by Mark Tronson, published by IFH Publishing, 3 Shelley Road, Wallacia 2750. Price: \$8.95.

This is the latest in a long list of books written by Mark Tronson. It is divided into 19 chapters which cover the train's background, operation, route, locomotives, incidents, etc., up to its pending demise, and the future.

The storyline is written in a 'laid-back' style and is based both on personal experience and hearsay. The latter can never really be proven and should be taken in a jocular vein.

There are two things wrong with the book - grammar and spelling. Because of the bad grammar, I found that I was constantly back-tracking sentences to pick

up the storyline

The spelling is a different problem altogether. The author states that he has opted to spell some words acceptable to the Australian school system rather than the English way. Why then does he spell 'siloh' for silo, 'flower mill' for flour mill, 'Coco Cola' and 'shinny' for shiny? The spelling mistakes apply also to certain towns/ranges in NSW.

A good book should be both interesting and easy to read, with its main purpose being to inform. I can't deny that this book informs (although accuracy in some areas appears questionable). I feel that it has been totally let down by the bad way in which it has been written. A good proof-reading of the first draft should have corrected everything - especially the spelling.

Allan Brown

35mm Railway Slides by Colour-Art, PO Box 567, Plymton, 5038. Price in text.

Colour-Art, in offering their photographic coverage of Australian Rail Transport in Colour, have produced a 24 page A5, soft-cover catalogue which, in this instance, also included a 12 page supplement. The catalogue details the sales policy of Colour-Art, the slide acquisition process and the list of photographers from whom the slides have been supplied.

This list is impressive, with names like: Aikins, Cole, Evans, Gower, Gunning, McCormack, Perrin, Campbell, Colquhoun, Cotterall and Cliff Olds. The slides have been duplicated by Technicolour S.A. Pty Ltd and the two samples to hand indicate the plastic framed reproductions are of fine quality.

The catalogue listing is extensive, covering almost all systems and highlights the fact that the slides listed



are only available for a set period of time.

Cost of the slides commences at \$2.00 each but drops as the purchase number increases, the rate being \$1.80 each for 50 or more. Postage is extra.

The catalogue, priced at \$4.50, is very helpful in detailing the slides required. The information supplied for each slide includes a reference number, month/year taken, the photographer and the subject which includes the location.

The Colour-Art system is similar to the British based 'Colour Rail'. Colour-Art should be as successful as its British counterpart.

Bob Gallagher

Railway Slides by Horizon Hobbies, PO Box 10113, Adelaide Street, Brisbane, 4000. Price in text.

In offering their range of slides for review, Horizon Hobbies have not been specific in how the range will be catalogued, but offer 14 slides for viewing. These are all Kodak duplicates in card holders. Colour is good as is the subject definition.

The range supplied is East coast based and includes: NSW SRA diesels, SMR & John Brown steamers, AIS diesels, Southern Portland Cement diesel at Berrima and BHP narrow gauge. Slides cost \$1.35 each or five for \$6.00, postage additional. Delivery period is quoted at three weeks.

Bob Gallagher

NSWGR/SRA 70 Class diesel hydraulic shunter etched brass body kit in N scale by N-Trains, PO Box 257 Merrylands. 2160. Price \$69.95 each.

The NSWGR ordered 10 of these units from Commonwealth Engineering at Granville NSW, the first unit being delivered on 15th August 1960, the last in May 1961. Their purpose was to shunt the yards around Port Kembla. They embodied a number of firsts including being the first true diesel hydraulic locomotive in NSWGR service and the first diesel hydraulic built by Comeng. They were a real transition locomotive between steam and diesel as they used six coupled driving wheels. The power from the 433 kW turbocharged V12 engine was transferred through a Voith hydraulic transmission driving a jackshaft which was in turn coupled to all wheels via side connecting rods. An article on the 70 class locomotives appeared in the September/October, 1980 edition of AMRM.

The kit comes in a plastic bag and contains a brass fret, taped to a piece of plastic to prevent it from being bent, and whitemetal castings of the exhaust stack, radiator grille and the sand box. A colour photograph and three sheets of instructions complete the list. The instructions take you through the assembly of the kit

step by step and are easy to follow. The parts came away from the brass sheet easily with only a very small amount of filing being necessary to clean up the edges. Care must be taken when folding the parts to keep the pliers as close to the fold line as possible to achieve a clean fold, particularly near windows. The kit is not as easy to assemble as the N-Trains 73 class because the fold lines are very close to the edge of the fret, but with care a good fold can be achieved and when finished looks very much the correct replica of a 70 class body.

The kit has been designed to fit on a Minitrix 2064 chassis. The Minitrix body is discarded and the brass body is clipped into the 'cat-walk' which is then clipped back onto the chassis. The instructions detail the modifications necessary to the chassis and the cat-walk and give a recommended range of paints to use to finish the model. Decals are not included in the kit.

The finished model looks like a 70 class loco if the modeller ignores the cat-walk and below, although detailing of these areas will improve the appearance of the unit. A nice kit for the modeller who wants to model shunting areas but unfortunately the Minitra looc costs around \$145.00. This, when added to the \$70.00 price for the kit, plus decals and perhaps Kadee couplers, makes for a finished unit at around \$230.00.

David Bennett

QR CLO Goods Wagon in HO Scale. Supplied by Northern Models, PO Box 325, South Brisbane, 4101.

The CLO is a general purpose covered goods van, partially louvred and representative of the Queensland Railways' modern, long freight rollingstock. At 16.74 metres (54'11") they are one of the longest freight vehicles in service on the QR. They have a wide door opening and reinforced floor so that fork lifts can operate directly into the vehicle. CLOs are generally restricted to the North Coast mainline.

The kit is packaged in a plastic bag with a card top and contains a one-piece body casting, a floor casting and two end sills. No buffers or bogies are supplied. The instruction sheet contains a reasonably clear stepby-step instructions and a clear plan of the vehicle. The kit supplied for review required extensive cleaning up before assembly could commence. There were a number of surface defects requiring careful cutting back, as well as pinholes requiring filling. There was also a reasonable amount of flash. Once cleaning up of the casting had been completed, assembly presented no problems. Bogies required shimming to bring the body up to the correct height. Buffers, bogies and Kadee couplers were added. Steps and brake wheels were omitted on this review model but should be added to ensure an accurate model.

Contrary to the instruction sheet, the CLO is painted in the standard QR freight stock grey. Wagon code and number panels were originally black with white lettering. Blackboards have now been removed from the left-hand end and the panel is now grey with black lettering. The review model was painted in the earlier scheme of black panel with white lettering.

Other kits reviewed by this manufacturer have not had the casting blemishes and defects of this kit. It may be one that slipped through, though it indicates the need for better quality control. Nevertheless, with patience and care, the kit makes up into a vehicle that is a good representation of the prototype. A must for modellers of the present day Queensland scene.

Reg Smith and Peter Cole

A Compendium of New South Wales Steam Locomotives, compiled by Alex Grunbach. Published and distributed by ARHS (NSW) Division, PO Box E129, St James, 2000. Price: \$39.95

The ARHS has published this long-awaited update on the steam locomotives of New South Wales.

The genesis of this book was back in 1955 when the then Department of Railways published 'A Century of Locomotives' to celebrate the centenary of the NSWGR. Revised and republished by the ARHS in 1965 as 'A Century Plus of Locomotives' it was, for many years, the initial reference tool for NSWGR devotees.

A planned revision in 1981 into five volumes titled 'Locomotives of New South Wales 1855-1980' stalled after one volume was produced. Further volumes were hopefully anticipated but nothing eventuated. The ARHS then made the commitment to produce one large volume embracing all steam locomotive classes and this 1989 publication is the result. Was it worth waiting for? The answer is definitely yes!

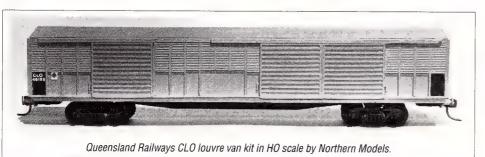
The 1989 edition retains the revised format adopted with the orphan Volume One of 1981. The most noticeable change in format was the removal of locomotive data from individual class descriptions to Appendix III at the rear of the book. This move had the advantage of allowing easier cross reference when comparing locomotive class specifications.

The information in the earlier 1955 and 1965 publications has again been revised and expanded to include additional supporting photographs and operational notes on the performance of many of the locomotives.

The soft-covered book now accounts for 312 A4 size pages, compared to 144 quarto size pages (which included the diesel classes as well) of the last complete work, the 1965 edition. (A hard cover version of the book is also available at \$49.95).

No less than 460 well chosen photographs, of which 19 are in colour, adorn its pages. The old edition had only 200 photos. It is pleasing to report that very few of the previously published photos have been retained in the new work. The book states that the selection of photographs was a major task, with over 10,000 prints, negatives and slides having been submitted by various enthusiasts. Most of the popular locomotive types are now supported by even more illustrations which give us a better idea of specific details, modifications and variations within the class.

The 38 and 57 classes receive close attention. Labelled illustrations and, in the case of the 38 class,



Page 58. Australian MODEL RAILWAY Magazine. April 1990.

an additional coloured sectionalised diagram, explain the location of various components to the unfamiliar. Another colour diagram explains the intricacies of the 55 class oil burning apparatus.

NSWGR researchers and modellers alike will also note that many photographs include detail of train composition, loading and wayside features.

Appended at the rear of the book are five sections dealing with:

- Steam Locomotive Numbering Tables;
- The (X) 10 Class of 1924 Classification;
- Locomotive Data;
- · Performance Curve Graphs; and
- Survivors from the Steam Era.

The inclusion of performance graphs is meritorious and well worth a close study.

Two points about the photographic reproduction. The bulk of the black and white photographs are a little washed out and muddy. They lacked sharpness in detail. This was particularly obvious when republished photographs from the 1981 edition were compared. This may be the fault of the art paper used in the production of the new edition. It does not seem to be as glossy as that used in the 1981 edition nor, for that matter, in other recent railway oriented publications. Secondly, poor production control has resulted in excest trimming, with consequent chopping of an unacceptable number of chimneys and buffers, an unfortunate circumstance.

Added to this there are unfortunate typographical errors, at least one misidentified photograph, one photograph printed back to front and several questionable assertions. All in all, the production has not done justice to the enormous amount of effort Alex Grunbach surely put in over the last decade.

In conclusion, the compendium, despite its production imperfections, should again become the first reference point for followers of NSWGR steam practice. The inadequacies of the now 25 year old edition have been eliminated; our well-thumbed copies can now be 'set aside'. NSWGR modellers should not be without a copy of the latest edition on their bookshelves.

Ross Verdich and Ian Dunn

1/2" Scale Denver and Rio Grande C16 Steam Locomotive by Delton Locomotive Works. Sample supplied by Five Star Models, 37 Woodmason Rd, Boronia, 3155. Price: \$999.00.

Delton have chosen the 3' gauge C16 2-8-0 as their first injection moulded model locomotive. The choice should prove popular with large scale modellers as the model displays all the quaintness and character of the prototype.

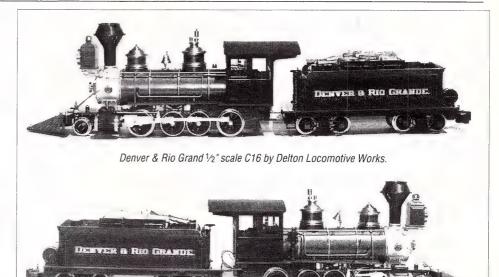
The C16 model, No. 268, was one of a number first built in 1883 and, over the years, many changes were made. Substantial modifications were carried out in 1914 and 1943. The model reviewed reflects the 'as built' condition but Delton have stated they intend to produce the later versions as well.

The C16 displays the colour scheme and all the trimmings of early American locos. It features a boiler jacket, steam dome and sand dome finished in blue 'Russian Iron'. The 'wooden' cab sides, tender hungry boards and tool boxes are chocolate brown, with red coloured old-style oil headlight, cow catcher and running boards. Wheels, cylinders, cab roof, tender body, backhead, air compressor and balloon stack are black. The smokebox is graphite. Brass coloured plastic and metal turnings are used freely throughout to embellish the domes, boiler rings, handrails, headlight brackets, pilot beam stays, cylinder head covers, whistle, handrails and bell.

Backhead detail includes fire hole door, horizontal throttle and Johnson bar. The tender features a very realistic load of wood fuel. Pistons and side rods are moulded in a hard grey coloured plastic.

With this model, Delton have maintained their excellent standard in injection moulded large scale models. All detail is well-formed, clean and sharp. And yet it possesses the robustness needed in these large models.

The driving wheels have Delrin centres with well-



formed fine spokes and metal tyres. I was pleased to note that no traction tyres had been fitted. (Invariably these deform, causing unsightly wobble in models.) The inner pair of driving wheels are, as on the prototype, flangeless. This feature is a bonus in selecting this prototype as the model easily negotiated small radius curves and points such as LGB's 1100 series without hesitation.

The drive mechanism consists of a vertically mounted can motor with worm/spur gear on the 3rd driver axle. It is hidden completely in the firebox and this allows a prototypical gap between the underside of the boiler and engine frames.

The model ran smoothly and quietly on the track. It's haulage capacity on grades could not be measured but on level track it hauled, without slipping, the six LGB bogie coaches that I could muster.

Electrical pick-up is attained through eight points on loco and tender. The headlight is realistically lit, via a constant lighting unit.

One of Delton's superb working knuckle couplers is attached Talgo-style to the rear tender truck. Coupling to the front of the loco; well it's not on for this model anyway, due to the long 'wild west' style cow catcher. An LGB style hook and link coupler is provided with the model.

We were unable to check the overall dimensional accuracy of the model but as a representation in miniature of the prototype, it certainly looks fine. They are available in three liveries, as described above with Denver & Rio Grande lettering, painted green and lettered D&RGW and painted black with a silver smokebox and lettered Colorado & Southern. They can also be fitted with PH Hobbies digitally synthesised sound and are thus priced at \$1349.00.

Ross Verdich

NSWR Signal Relay Hut Kit in HO Scale by TMRC, 106 Gymea Bay Rd, Gymea, 2227. Price: \$12.00.

Signal huts are very common on any railway system, the NSWR developing a number of different styles over its long history. The style typified in this kit is of pre-cast concrete, which has been modified. The kit provides for a base which can have the assembled model elevated, if required.



A three panel hut, it has a door each end, which is unusual, and a panel repaired with Fibro.

Supplied as seven cast metal components, it assembles into a reasonable facsimile of the hut used on the NSWR mainline. Casting defects mar the finish of some components, but these can be repaired with body

filler. Likewise, the casting detail is reasonable, although some improvement could have been applied to the masters, especially the definition of the gaps between pre-cast sections - they are not uniform over the height which, if applied to the prototype, would not have allowed the box to be assembled.

A useful product, which would have been aided by some information on assembly and placement on the layout.

Bob Gallagher & Es Davies

NSWR Diesel Spare Parts in HO Scale from Classic Brass Models, PO Box 72, Liverpool, 2170. Price in text

With the release of the NSW 49 class, Classic Brass Models added to their range of detailing parts, all from the Samhongsa built 49 class project.

The **Clyde Builders Plate**, which is priced at \$4.00 for two, is a representation of the silver and blue plate attached to the Clyde built diesels. These would be helpful to anyone detailing a plastic 81, G, BL, S, 42, 422 or whitemetal N or T, or epoxy X, or kitbashed B or A class.

The **NSW Coat of Arms**, reproduced as a silver emblem on a blue background, would be of assistance to modellers detailing a NSWR period diesel locomotive. They are priced at \$4 for a set of two.

The **six wheel mechanism** is priced at \$80.00 a pair and comprises the bogie mechanism, including the gear towers as used on a 49 class. The 11.5mm stainless steel wheels have a 19.5mm/24mm axle spacing. Wheel back-to-back dimension is 14.3mm.

The **49 class bogie sideframes** are a set of four plus the mounting carrier and attachment screws. Highly detailed, they are correct for a 49 class, as well as the 421 class. The pack costs \$30.00.

Bob Gallagher

Australian Diesel - Locomotive Handbook by Mark Tronson. Published by IFH Publishing Co., 3 Shelley Rd, Wallacia, 2750. Price: \$8.95.

210mm x 133mm in size, this card-covered book covers the diesel locomotives in use in Australia at present. In his preface, the author acknowledges it is not an in-depth study - it is NOT. He also acknowledges it is not an exhaustive list - again it is NOT, for it does not cover any of the diesels in private ownership.

Set out in five system-based chapters, the book covers each class with a brief written resume of each, with black and white illustrations accompanying the text. In being brief, the text rarely details date of entry to service, number in class, nor the liveries applied - all essential to modellers. Each resume does, however, pose 'Questions for Enthusiasts'. Modellers need the answers to these questions and as there is no answer section at the rear, the need to purchase the book as a research tool is nullified.





NSWR platform facing kits in HO scale by Ian Lindsay Models. The timber facing type is on the left with the concrete style on the right.

Almost any well read modeller could accurately challenge the text applied to each locomotive class. Suggesting that "This Victorian T class, which has undergone various design changes, has basically been the same locomotive for many many years" will get almost every VR modeller up in arms. While the text acknowledges body design changes, it does not attempt to cover or detail any of the styles, nor link the Ts to the P, except by a single photo captioned "P Class - update of T Class".

The many errors and omissions suggest that it has not been proof-read by anyone with railway knowledge. Commencing with the Acknowledgements, errors appear on almost every page, from the V/Line G, suggesting it "mainly ran between Sydney and Melbourne" to the Australian National '800' class, suggesting that it was identical to a NSW 48 class. The bulk of the G class run on the broad gauge while the Bo-Bo SAR 800 class was built by English Electric, there being 10 in the class. The Co-Co Australian National 830 class should have been referred to, which was built by A.E.Goodwin, not English Electric. The title cannot be considered a once-off error as it appears six times, in addition to the photo caption.

There is strong evidence that the author of this book does not know the subject he has written about - and with the information so readily available, it would appear that his research was minimal.

Apart from the four colour photos on the cover, this book is of little value to modellers.

Bob Gallagher

NSWR Platform Edging Kits in HO Scale by Ian Lindsay Models, PO Box 124, Pendle Hill, 2145. Price in text.

While having a standard height for their passenger station platforms in non-electrified areas, the NSWGR did not restrict themselves to a single building material. In most instances the platform consisted of a sturdy facing which had a height of 3'2" (77cm) from the top of the rails, with a 12' wide platform which was usually ground fill, topped with fine gravel or bitumen. Where the ground level varied excessively, the platforms were suspended concrete, and did not have a facing.

In providing their range of platform facing kits, lan Lindsay Models has given the modeller two options - that of having a concrete or timber facing. This covers 66% of the most common styles, brick being the one not supplied.

The timber facing kit is supplied in four sections to a length of 160 scale HO feet (48m), which is priced at \$16.00. A two piece extension kit, priced at \$9.00, provides an additional 96 HO scale feet (29m).

The components are grey epoxy casting which have some flash which is easily removed with a file or knife. The face is detailed with six planks behind 10" (25cm) posts, at 8' (2.4m) centres. The surface of each casting is detailed with timber grain and the joints between the planks emphasised. Provision is made for joining the sections and hiding the gaps. The main kit is provided with the 15' (4.5m) ramps as well as a very useful instruction sheet. This covers in detail the location of the platform facing using various codes of rail. While reference to the Data Sheet on passenger platforms is advised, the standard distance from rail was not detailed. The platform edge should be 5'6" (1.68m) from the centre of the track. Unless you are a 100% dead scale modeller, always allow a tolerance of 2-3mm extra as it will save damaging rolling stock or out-of-gauge locomotives.

The concrete face platform is based on Robertson and is supplied as a six piece 234' (70m) platform. This facing was made up of sectional pre-stressed concrete segments positioned on 6' (1.8m) risers. Hidden joint-

ing of sections has been provided for, as has positioning and painting, in the detailed instruction sheet, which this time covers the distance from the track to the platform. This kit is priced at \$24.00.

Casting sharpness and detail is excellent on these kits. They are very useful products for the NSWR modeller who now has a choice as to the style of platform he can use and corresponding buildings placed on it.

Bob Gallagher

Videotape 'Hudsons Through the Hills', distributed by ARE Video, PO Box 8, Collins St, Melbourne, 3000. Price: \$49.95

As an unashamed admirer of Victoria's fleet-footed Hudsons, I looked forward greatly to this video. It records the events of June 1987 when, for the first time, an R ventured into South Australia for a week-long tour called 'Broad Gauge Bonanza'. Steamrail's immaculately presented R761 is the star, with supporting action from 2-8-0 K153, SAR Pacific 621 and Steamtown Peterborough's ex-WAGR PMR Pacific.

The camera work on this 88 minute videotape is thoroughly professional, with an excellent range of angles and locations, including some helicopter work, and the soundtrack is well recorded and reproduced.

Highlights include R761 climbing through the Mt Lofty Range, taking the last broad-gauge steam train into Peterborough (the line is now lifted north of Hallett) and running along the seashore on the Goolwa-Victor Harbour line of Steamranger with that group's superbly restored mainline and 'Centenary' cars. A wide range of supporting shots are included, with plenty of human interest, detail cab shots and some stunning close-ups of the interaction between wheel and rail. The video is, all in all, a very well-done record of a unique enthusiast event; its only shortcoming is a commentary which is banal at best and is singularly uninformative. My only regret is that nowhere does R761 perform with the awe-inspiring zest displayed at Aus-Steam 88 or during its parallel running with 'Flying Scotsman' last year.

lan Dunn.

'Locomotives International No.2', edited by Donald Binns. Distributed in Australia by ARHS (NSW) Division, PO Box E129, St James, 2000. Price: \$10.00.

We have had the opportunity to look over the second issue of this intriguing magazine and it can be reported that the basic 34 page format introduced with the first issue has not been changed.

Again, the magazine's contents include a selection of historic and contemporary black and white photographs, old line drawings and reproductions of locomotive builders' advertisements from worldwide sources. Articles presented in this issue include a 1962 safari to Finland, Narrow Gauge Steam in Industry, Pennsylvania Railroad 2-6-6-2 FF1 Freight Electric Locomotives (USA), The Remarkable 'Double-Enders' of Monsieur Petiet (France) and The Transandine Route Part 2 (Chile and Argentina). The 2 page centre spread features a builder's photo of a rather remarkable Colombian Railway 3' gauge 3 cylinder 4-6-2 with outside frames.

The presentation and production of this magazine is very good. If your taste in railways is 'Continental', this magazine should appeal to you.

Ross Verdich

Oz Control Walk-A-Round Throttle by CIL Distributors, PO Box 236, Castle Hill, 2154. Price: \$49.00.

CIL Distributors have released this hand held controller to cater for the lower end of the market. Designed for use on Z, N and H0, it is contained in a 70mm x 120mm x 30mm plastic case fitted with a 1.8m lead. The end of this lead is connected to a terminal strip which is labelled for cable connection to track and the power source - 16 volt, 1.6 amp AC supply is recommended.

The direction switch is mounted on the side with the control knob, in front of the face plate. A power LED completes the visual components. We used a 18 volt AC supply and the controller proved to have an acceptable control range with 80% of rotation having visible control of the train.

Tested on HO scale models, the low speed control speed was very smooth with no pulsing evident. The control up to top speed was fine. Models tested included a SPUD powered Derm, Samhongsa built VR X class, AR Kit Co. NSWR 81 and 45 classes, Lima S and 422 classes, Athearn SD45, Sagami powered NSWR Q class, MW-005 powered 30 class, Powerline 81 and BL classes and Hornby 57XX. Control over all these was quite acceptable.

Presentation of the controller is excellent, with a solid cable clamp provided. The controller box is provided with air ventilation and is a shade on the large size for single hand operation. The direction switch does not have an off position. This means you cannot shut the power off completely to prevent creeping. Otherwise, it is a handy controller. The manufacturer advises that a centre-off switch will be used on future production runs and that a panel mounted style will be released soon.

Bob Gallagher

LNER Locomotive Allocations - The Last Day 1947 by Irwell Press. Distributed in Australia by the ARHS (NSW) Division, PO Box E129, St James, 2000. Price: \$19.95.

A companion volume similar in all respects to the LMS book reviewed in the December AMRM. This soft-covered 48 page book is divided into two parts. Part 1 lists each individual locomotive in order of the LNER Classification system (see below) and its shed allotment on the day prior to nationalisation of Britain's railways. Part 2 lists the sheds, with the respective allocations, in geographical areas existing on the LNER at the time.

Altogether, there were some seven thousand locomotives on the LNER's books immediately prior to nationalisation. Approximately half the fleet was LNER built (mainly Gresley types) and the rest were inherited at the grouping of the LNER in 1923 from the former Great Central, Great Eastern, Great Northern, North British and North Eastern locomotive fleets.

Twenty-two well-chosen black and white photographs from the period supplement the text. These depict a small selection of loco classes in not only standard three-quarter views (a minority) but also from all angles in different perspectives.

One point to note though, is that the LNER renumbered all their locomotive stock in 1946. Accordingly, the listings in this book may be unfamiliar to some. For example, the well known 4472 'Flying Scotsman' carried engine number 103 in 1947 (and 60103 after BR nationalisation).

Ross Verdich

NSWR Redfern Car Detail Castings by Pioneer Scale Models, PO Box 3091, Parramatta, 2150. Price in text.

With the release of the etched brass Redfern car kit, Pioneer have released some of the special detail castings as individual components. These will be of assistance to modellers working in the NSWR 1910 era.

The underfloor mounted cylinders for gas lighting

are available in short and long style, each priced at \$1.50. Having a diameter of 4.8mm, they are 33mm and 42.5mm long. Both have domed ends, mounting straps and a mounting sprue of 2mm diameter.

The gas lamp tops for the single roof car are priced at \$3.00 for six. These are 7mm high and have a 3.3mm diameter housing. They have no mounting sprue.

The double roof gas lamp tops have a short 1.7mm mounting sprue, a 3.5mm housing, which is 2mm high and has a 4.5mm cap. They are priced at six for \$3.00.

The brake cylinder and air reservoirs are sold as a set of three for \$3.00. The brake cylinder is 3mm x 3.4mm long, having 3.7mm end flanges and a 1.8mm x 2mm plunger housing, representing a 10" HO scale cylinder. The air reservoir is the straight end style, is 3.5mm in diameter, 7.8mm long and has cast on mounting straps and a 1.2mm mounting sprue representing a 12" x 27" cylinder, one that was commonly used on many NSWR vehicles.

All castings are very clean, sharp in detail and have a lighter than usual body mass.

Bob Gallagher

Roskopf motor vehicles in HO scale. Imported by Euromodel Distributors, PO Box 388, Mittagong, 2575. Price in captions.

Four of these excellent models have been received from Marg Webb of Euromodel Distributors, for review - a Mercedes Benz small tipper, a fire tender, a prime mover and a 1928 Mercedes Benz L5 coal truck. These are well finished models with sharp printing where applicable.

Detail and scale appears to be precise and this can be seen with the correct wheel profiles and wheel nut spacing. Included where relevant are rear vision mirrors, hose reels and other delicate details to be added if required.

The catalogue shows a wide range of vehicles available and at least half are relevant to the modern scene. Some purists may have difficulty with the Saurer and Renault/Saviem range but the range of fire-fighting vehicles will excite some collectors. The L5 Mercedes is well represented and presented in a range to cover most applications. I have to say - try not to buy 1003, a 1927 Charabanc - no matter what your interests are.

In summary, Roskopf Models are accurate representations in 1:87 scale, highly detailed and of a quality at least as good as any available in the moulded plastics field and they are very competitively priced.

Max Chaseling

Pilots for the Lima NSW SRA 422 Class Locomotive. Manufactured by Scaleways, PO Box 142, Kallangur, 4503. Price: \$4.50.

This kit, which comprises two pilots, two coupler bases and an instruction sheet, provides for the fitting of a prototypical pilot each end of a Lima 422 class, as well as supplying a base for the Kadee coupler.

All components are free of flash, and the pilots have a prototypical appearance.

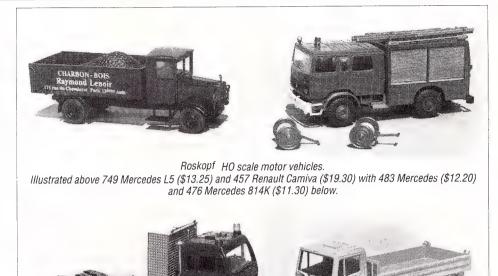
The instructions are quite explicit and cover all aspects of fitting both the pilots and couplers. The one detail not mentioned is the type of Kadee coupler to be used. No.5s are a bit too short, but No. 26s have an ideal length shank to extend out past the buffing plate.

Bob Gallagher

'Metropolitan and District - A Driver's Eye View'. Videocassette from Video 125, available from Miniature World, 530 Great Western Highway, Faulconbridge, 2776. Price: \$59.95.

This is one of the latest in the 'cab ride' series from Video 125. Metropolitan and District features the London Underground, along a circular route from Hammersmith to Whitechapel (the Metropolitan) and return via Whitechapel through Hammersmith to Ealing Broadway (the District line).

A special image intensifying camera, plus the train's natural lighting, allows the viewer to see at the same intensity as the drivers. The route chosen includes the very first section of public underground railway in the world (Paddington to Farringdon) and one of the busiest and most intensive services (Tower



Hill to Gloucester Road).

The 84 minute tape is in colour and is recorded in Hi-fi stereo, with an informative narration.

The tape varies somewhat to the earlier ones in that it now switches from the normal 'on-train' approach to a station, to an on-station camera showing arrival and departure, then back to the on-train camera. It breaks the monotony.

I suppose this tape could be likened to an 'inner suburban train to the city and return'. It's surprising, however, just how much is underground - all 4 rail, of course.

This one may not appeal to all but it's certainly different to the earlier country rides. Certainly worth considering, at least.

Allan Brown

'Union Pacific Big Boys'. A Video Rails Video Cassette. Distributed by ARE Video, PO Box 8, Collins Street, Melbourne, 3000. Price: \$39.95.

Volume II of the Classic Collector's series, this 30 minute tape of the Union Pacific Big Boys covers the history and use of these massive 4-8-8-4s in full colour and Hi-fi stereo.

From their conception in the 1930s, the 4-6-6-4 Challengers were not adequate to cope with the tonnages and grades of the ??Wasatch. The early 40s saw the development of the 4-8-8-4 - the video conveys this in the narrative. Action scenes includes servicing at Green River, 70 mph (110 kmh) speed runs, slow hauls up ½% (1 in 75) grades, as well as double heading by two 4000s, or by the gas turbine or a single F3, this scene depicting the real size of these giants. Depot scenes at Laramie and Cheyenne feature, as does action on the famed Sherman Hill, with trains of 4100 tons in tow.

The quality of the video and the sound is very good. The narration is excellent, being very informative. It covers in detail the servicing of these monsters that only had a 75 mile (120km) range on easy terrain. Also detailed is the oil firing of 4005.

Although brief, this is a very interesting video.

Bob Gallagher

NSWR Metal Castings in HO Scale by Krystall Castings, PO Box 334, Lane Cove, 2066. Price in text.

Mansfield Hobbies, when active in supplying NSWR modelling, needs, had a number of metal castings which were found to be very useful by detailers.

These castings are once again available, to the same standard as produced previously. The range is extensive and includes the NSWR water column kit which has a rotating arm (\$6.75); 42 class pilots

(\$1.25), 42 and 43 class buffers (\$1.25) and torpedo ventilators, for NSWR coaches, which are 2.6mm wide, 2.9mm long and 2.3mm high (50 for \$3.50).

Goods buffers available (24 for \$2.75) are the parallel shank type which have a shank diameter of 1.6mm, plate diameter of 3.5mm and a housing diameter of 2.5mm. The buffer is 4.5mm long (2.8mm over housing) and has a cast mounting spigot.

Coach buffers also available are the large buffing plate style with the short, outside supported housing. The buffing plate is 5.5mm in diameter, with a 1.4mm shaft. The housing is 1.7mm wide and 2.5mm long with the complete assembly being mounted on a 3mm x 3mm x 1.2mm block, representing the timber extension block as used on the prototype (24 for \$3.65).

Brake cylinders for the 42 and 43 class have been cast integral with an annealed brass wire, representing the brake rod (12 for \$3.50), a process which has been duplicated for the 442 brake cylinders (12 for \$3.00) except that on these the brass wire protrudes only from one end of the cylinder.

A diesel locomotive straight buffing plate is supplied with 1.9mm spigots, at 20.8mm centres.

Goods wagon yard brake handles (20 for \$3.50) are supplied on a 1mm mounting spigot and have 0.8mm spokes, the length over two being 4.8mm.

It is good to see these parts available once again; the torpedo vents proving very popular with the detailing of the Lima and Powerline cars.

Bob Gallagher

'LMS Engine Sheds - Volume Six - The Highland Railway' and 'Great Northern Railway Engine Sheds - Southern Area' from Irwell Press. Distributed in Australia by ARHS (NSW) Division, PO Box E129, St James, NSW, 2000. Price: \$49.95 each.

There is no doubt that followers of Great Britain's railways are well served by the prodigious output of their railway authors. The publishing houses, too, support this interest with well produced books that I consider to be without peer in the railway interest field. The aforementioned publications from Irwell Press continue the high standard. A brief resume of each book's subject matter follows:

LMŚ Engine Sheds - Volume Six - The Highland Railway

The Highland Railway was one of seven principal companies absorbed by the LMS at grouping in 1923. The Highland differed markedly from the other constituents. It served an isolated and scattered rural community. Its mainline was largely single track driven through some of the most rugged terrain in Scotland. Small, simply constructed sheds grew up on branches,

AMRM NEWS

junctions and the numerous banks which dotted the line. The book includes details of each of the 15 engine sheds still operating in 1947. Sites closed prior to nationalisation are also studied briefly.

Great Northern Engine Sheds Part 1 - Southern Area.

This is the first volume of a two-part series. The Great Northern Railway was one of the large companies absorbed into the LNER in 1923. The book describes the sheds associated with the mainline out of London's Kings Cross Station and the various branches working north to Grantham. The introduction describes the general development of GN engine sheds. The book states that it was, in the main, piecemeal with a marked absence of standardisation. Their only common feature "was a certain tumbledown neglect". Yet they housed and cared for some of the most remarkable and famous locomotives in Britain.

The individual mainline and branchline sheds are covered in subsequent chapters.

Appendices then follow which deal with the various technical aspects and intricacies of shed working.

Each book consists of about 130 pages with a profusion of black and white photographs of high standard. Track layout arrangements of each shed are included, along with, in some instances, shed structure plans. It is obvious that quite a deal of painstaking research has gone into the production of these books - each covers its specialist subject matter superbly.

Ross Verdich

DIARY

Continued from page 12

EXHIBITIONS

CASTLE HILL - NSW. July 21 and 22, 1990 at Castle Hill Community Centre, Old Northern Rd, Castle Hill. Open 9am-6pm (Sat.), 9am-5pm (Sun.). Admission \$3.50/\$2/\$8. Organised by Hills Model Railway

EASTWOOD - NSW. August 18 and 19, 1990 at Masonic Hall, 186 Rowe St, Eastwood. Open 9am-6pm (Sat.), 10am-5pm (Sun.). Admission \$3/\$1/\$2/\$6. Organised by Marklin Modellers of Sydney. Details AH (02) 750 7062.

COMPETITIONS

BRISBANE - Queensland. July 20, 21 and 22 in new Club Rooms. Open 5pm-9pm (Fri.), 9am-9pm (Sat.), 9am-4pm (Sun). Models Fri. 5pm-9pm. Admission \$2. Organised by All Gauge Model Railroad Club. Details (07) 399 3190 ah or write AGMRC, Box 122, Eact Prichage 4160 East Brisbane, 4169.

SALE DAY

CALOUNDRA - Queensland. April 7 1990. Caloundra & District Model Railway Association Bits & Pieces Sale. Caloundra Arts & Craft, Golden Beach. Details (071) 91 2859.

CONVENTIONS

AUCKLAND - New Zealand. Waitemata 150 Easter Convention at Auckland College of Education, Epson Avenue, Epson. April 13-16, 1990. Details PO Box 29 110, Greenwoods Corner, Auckland 3, New Zealand. STRATHFIELD - NSW. May 12, 1990. SCMRA Seminar at Catholic Teachers College. Subjects include layout and scenery planning plus kit assembly. clude layout and scenery planning plus kit assembly and locomotive tuning. Details - PO Box 235 Matraville, 2036.

NORTH RYDE - NSW. European Modellers Convention is to be held at Macquarie University, North Ryde on 19 and 20 May 1990. Details - PO Box 236, Castle Hill, 2154.

PETERSHAM - NSW. July 21, 1990. Modelling the Railways of N.S.W. Convention at Petersham State Rail Authority Training Centre. Details PO Box 200, Sylvania Southgate, 2224.

The Australian MODEL RAILWAY Magazine

Address all correspondence to:-

The Editor **SCR Publications** P.O. Box 4, LITTLE BAY 2036

Phone (02) 661 4046 FAX (02) 661 4323

Continued from page 32.

New scenery items are being stocked by two outlets, both catering for the Australian modeller. Box Car Hobbies has released a gum tree, while LJ Models has released three new card kits. These are the J-1 Standard Design Station House (based on the B22 Data Sheet), NSWR Skillion Roof Signal Box, and toilet (based on James McInerney's drawings in December 1986 AMRM), while James' drawings have also been used as a basis for the corrugated iron curved roof

Scaleways has released their Australian Industrial Shed kit, priced at \$39.95.

Broad Gauge Bodies have released a polyester kit for the round roof version of the West Australian WVX

Casula Hobbies advise that they expect their C32 class model to arrive from Korea early in March. They also advise that they plan to produce the NSWR Z19 class, with both cab variations and that they have booked the NSW SRA 44 class for delivery late in 1990 or early 1991. Joe hopes to cater for all tastes with all three manufacturing runs, each in at least two modification periods. Stay tuned - the variations are almost endless.

Hobbies Plus will soon have stocks of an HO scale VR L class electric locomotive body kit from Northern Models.

The ARHS (NSW) Division have released their latest book 'A Compendium of New South Wales Steam Locomotives' which covers the steam locomotives of the NSWR. Its predecessor, 'A Century Plus of Locomotives', has been out of print for many years.

Footplate Models' next locomotive from DJH will be the D59 class with delivery expected around May. It is interesting to reflect on the C36 survey last issue. Almost anyone will tell you that the 'round top Pig' is one of the most popular locomotives in NSW. Well, four people advised Footplate that they wanted a round top C36. This number would not be an encouragement to anyone. So, if you were holding off advising Footplate of your purchase intent, let them know im-

Precision Scale Models had a pilot of their VR T class locomotive on display at both the Corio and Croydon exhibitions in Victoria. It is understood that a pre- production sample will be on display at Camber-

DERAILMENTS

Last issue, there was an error in the listing of the Post 1953 NSWR Bogie Brakevans. The single JHG van built in 1977 was 34094 and not those listed

Also wrongly detailed was the surname of the new owner of Hobbycraft-Barwoods. He is Lester Pleydell. Sorry for the flack we caused Lester!

AMRM apologises for any inconvenience caused by these errors.

Broad Gauge Models' next locomotive kit, the popular VR K class, is being prepared with the usual BGM demand for the highest level of accuracy possible. These include the correct wheels and gear ratio to allow for the right wheel spacing. This guest for accuracy has delayed the model slightly, it now being due in August 1990.

While the K class will not be at Camberwell, BGM expect to have their full range of etched brass kits available, including the lattice signals and the coal skips. Accompanying the coal skips will be the long awaited coal stage.

BGM have also advised of an impending surprise or two, one of which may be at the Camberwell exhibition. They have also advised their intention of producing the TT30 bogies which are correct for fitting under the C vans or TP refurbished vans.

Ian Lindsay Models has released four new epoxy kits. These include the 160' Timber Platform Facing Kit and 96' Platform Extension kit, the NSWR 234' Concrete Platform Facing Kit and the MHO/KB Modification Kit. They have also released a pack of four corrugated water tanks, ideal for the scratchbuilder or detailer.

With the arrival of their HO and 4mm scale kits for the NSWR Redfern cars, Pioneer Finescale Models have released a number of the Redfern car castings as individual items. These include the long and short gas cylinders, the brake and air cylinders and gas lamp tops for single and double roof.

The advertising deadline of this issue coincided with the Nuremburg Toy Fair and the list of locals attending was extensive. It will be interesting to learn of any planned new models in the next month or so.

To complement the original release of their popular model, AR Kit Co have added more number/livery combinations to their 45/600 class range. They now offer 4529 and 4537 in Red Terror, 4501, 4505 and 4509 in Indian Red & Chrome, 4508 in reverse vellow. 3507 and 3525 as Red Terror 35 classes and 602 in Mustard Pot.

It is pleasing to report the success of another Australian model railway supply company overseas. With Tempest Electronics selling their large scale controller to America, it is tremendous to see the infra-red throttle from Catnip Enterprises also being warmly received. A very impressive review of this Australian designed controller was included in the February 1990 issue of Railroad Model Craftsman.

Next Issue

Last issue we promised to bring you an article on the NSWR MHG brake van. As can be clearly noted, it is not included in this issue - it was too large. Hopefully we will have the space to present it in the next issue or

Also projected for the June 1990 issue, due out May 22, is a coverage of East Matelend, Building a NSWR Q Class and a kitbash of the Australian national slab steel carrier. With the Sydney Toy Fair being held in April, we hope to be able to bring some good news of forthcoming products.

SCMRA Modelling Seminar IV

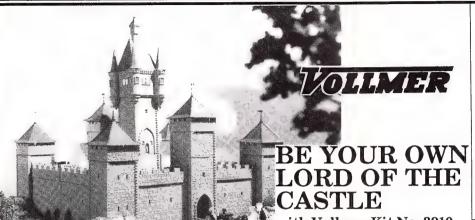
Catholic College of Education, Albert Rd, Strathfield 12 May 1990

Program

- Opening Ray Love
- Layout Design: Concepts & Reality Ian Thorpe
- Scenery the East Matelend Way Doug Blunden & Phil Kemmis
- Painting Locomotives Ian Dunn
- White Metal Loco Kit:s Making Them Run & Soldering Es Davies & Al Cutmore
- Closing Address Ron Cunningham

Participants will attend each session in small groups. Commences 9.00am, finishing ground 5pm, Hot lunch included in cost of \$17.00. Numbers limited so book early to avoid disappointment. Send payment to SCMRA, PO Box 235, Matraville.

SUPERIORITY DOES NOT COST IT PAYS



SMOKE GENERATORS

Add "LIFE" to your layout fit a "SMOKE" unit in .

Houses

Locos-Steam or Diesel HO/ OO, LGB, No. 1 Factories

Engine Sheds

Burning houses, bush fires Ships and diesel trucks

ALSO remember Seuthe Cleaning aids and Oil.

The NEW Vollmer-system-if you want to change the position of the castle, walls and towers on your layout. DO IT!!! All the parts DO NOT NEED TO BE GLUED TOGETHER. Just put them together with this NEW SYSTEM. All parts fit perfectly. And do not forget "CASIMIR" the Electronic Ghost - Kit No. 3911

SOMMERFELDT

SOMMERFELDT catenary for realism. Metal masts - H Section, Trellis and Tapered Round. Fine scale contact wires in various lengths (10 in HO & 6 in N). Catalogue in English . . .

HISTORIC LAMP **BRINGS** STREETS TO LIFE

Bring a 19th Century street scene to life with these detailed lamp posts. The HO scale models are based on prototypes used in Berlin.

Brawa lights are made from brass, fully assembled and ready to install. The lamp operates from any AC or DC power supply to Max 16V.

Supermodel

SALFORD VIDEOS **OUT NOW**



Some NEW titles from Salford Video

Railways of the Mosel(le)

Railways of Northern Germany Alpine Express (3 great Swiss Alpine

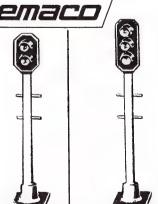
Steam in Wales Vol. 1 (Llangollen, Bala, Ffest, Taly)

European Video Express Vol. 7

and COMING SOON...

Iberian Rail Trail (Spain & Portugal)





HO & N METAL SIGNALS

14-19 Volts 2 Colour - 3 Colour Good value from under \$20.00



• 130 different Coaches and Wagons in N – and GUESS WHAT!!!

Signals, Block-Control, Transformers, FMZ Multi Train Control System and much, much more, 990 FULL COLOUR 193 Page Catalogue NOW available from all good hobby shops. Profi-Track with Built-in-Ballast, Electric FLEISCHMANN'S

Exquisite Accessories for the Railway Modeller

INSTANT SCENERY

for HO, N, Z and 1 Gauge (LGB)

Latest in the scenery products

Grass mats (Special ones for N & Z

Mini Scenic models for all gauges, eg scrap yards, fields, swimming pools, tennis courts etc.

NEW pre-formed layouts and tunnels.



SOLE AUSTRALIAN AGENTS FOR: FLEISCHMANN, BRAWA, BEMO, SOMMERFELDT, ROSKOPF, NOCH, VOLLMER, HAG, REPA, METROPOLITAN, SALFORD VIDEOS, KRAUS CLIPS/TOOLS, SEUTHE SMOKE GENERATORS Catalogues and price lists for above brands available from "all good hobby shops"

Fax No. (048) 721 183 TRADE & GENERAL ENQUIRIES TO P.O. BOX 388, MITTAGONG 2575 - TELEPHONE (048) 712 966

MITRONICS Telephone: (02) 449 9486

Add realism to your model railway with one of our Australian Made electronic accessories:

- Constant lighting unit
- Automatic train detector
- Crossing bell sound and flasher
- Onboard steam & chuff sound unit and more

Please telephone for a catalogue or the location of your nearest

Mitronics retailer.

Ballarat Model Railway Spectacular

Ranger Barracks Drill Hall **Curtis St** BALLARAT

June 9, 10, 11

Saturday 10am-9pm Sunday 10am-6pm Monday 10am-5pm

Admission:

\$3.00 Adults \$1.00 Children \$8.00 Family

Layouts all sizes

Commercial & historical

NMRA modelling competition

FIDDLEYARD

MODEL SERVICES

- KIT ASSEMBLY ALL TYPES
- PAINTING & DECALLING -BRASS, KITS, ETC.
- RTR BGM KITS AVAILABLE **EX-STOCK**
- LAYOUT COMPONENTRY
- YOUR OTHER NEEDS?

MAIL - P.O. COLAC, VIC. 3250 Phone - (052) 31 4930 9am-9pm

WALTHERS

1990 NO CATALOG...THE WORLD OF HO SCALE \$19.95 Over 730 pages, meanly 300 manufacturers of new products, photos andhandy reference quide

1990 WORLD OF LARGE SCALE
An all new listing,over 230 pages,colour, in Large Scale..LGB,MDC,Bachmann,Delton...

1990 WORLD OF N & Z Again NEW with 360 pages of N&Z

1989 TRAINALOG O,HO,N 132 pages full col. \$9.00 Valid for two years,over 2500 products

[POSTAGE All Catalogues \$2.50 each]

ATLAS HO

ATLAS HO NEW NEW VERY LIMITED SUPPLIES

GP 7 Two numbers per roadname, Dynamic or Non-dynamic versions available \$160.00

Undec.CB&O.S.FE.RG.EL.PRR.Sth.UP.WM.RI. Clinchfield

ATLAS N

ATLAS/KATO SD 7 \$TRA

[Undec;RG:SP:B&O:B&LE:GN]

ATLAS/KATO SD9 STBA [Undec:PRR:CR:CB&O:N&W:STH]

Each Roadname two numbers; Dynamic/Non-Dynamic Versions available both models

NEW NEW NEW

90T Hoppers CR,C&O,NYC,BN \$8.95 \$8.95 \$9.40 40° Box Cars Plug Door Canadian Pacific A.R.T

40' Box Cars Sliding Door SSW,GM&O,WP,CB&Q 8.95 B&O, PRR,NYC \$9.40 50' DD Box SP \$9.40, B&O \$8.95 50' Mech. Reefer Tropicana \$10.40, FGE \$9.40 ACF Centre Flow Shell, Dupont \$10.90

KATO N

KATO F3A/ F3B Powered Locos GN, CN, NYC. Diff. Nos Available \$99.50

LIFE LIKE HO

BL2 Diesel NEW 8 Wheel Drive,5 Pole Skew motor...Monon.C & O. WM.

BOOKS NEW STOCKS

Penn Central Power \$67.50 Clinchfield \$57,00 The Berkshires and Texans Canadian Natl. Railways \$59.90 \$34.50

FROM MODEL RAILROADING MAGAZINE
Model Railroading with Athearn Vol.1
Best of Model Railroading Track Plans
Building your next Model Railroad
N Scale Manual

[Post \$2.10 each]

N. SCALERS

The New American MAGAZINE for N Scalers now available from J&J. Bi-monthly at \$7.90 posted

\$13.95

WALTHERS Participating Dealer CON COR AFFILIATE DEALER BANKCARD, MASTERCARD, VISA, AMERICAN EXPRESS ACCEPTED

MAIL ORDERS A PLEASURE POSTAGE AT COST

J. & J. HOBBIES РО ВОХ 155, BEAUDESERT, QLD. 4285

RETAIL 415 Beaudosert Rd, Moorooka. Thur/Fri 6pm-9pm. Sat 9am-4pm. Phone (07) 2774429

COLOUR-ART

P.O. BOX 567, PLYMPTON SOUTH AUSTRALIA 5038

AUSTRALIAN RAIL TRANSPORT IN COLOUR

35mm COLOUR SLIDES

Our 1990 catalogue, listing over 600 quality slides of Australian locomotives is now available. The listings feature steam, diesel and electric locomotives from all states, including private railways and preservation groups. Something for everyone. Send \$4.50 to receive your copy which includes a sample slide and return







COMMING SOON!

WAGR

WVX

Box Car

Australian Prototype

Body kits as seen running through South Australia.

While we are quite happy to answer customer's questions (when time permits) we regretfully request that they must be accompanied by a stamped, self addressed envelope.

TRADE ENQUIRIES

P.O. BOX 137. **DAW PARK. 5041.**

Phone (08) 297 8524 Office Hours, 12 - 2pm S.A. time

THE **TURNTABLE**

88 BUCKLAND ROAD **NUNDAH OLD 4012** PHONE (07) 266 4547

Mon-Tue-Wed-Fri 9am to 4.30pm Thursday 9am to 8pm

8.30am to 4.30pm

MAIL ORDER

Saturday

PRICE LIST AVAILABLE S.S.A.E.

BOOKS

R.T.M ARHS NSW OLD

BUILDING & WAGON KITS

AR KITS - BGB - SCALEWAYS MINI MODELS - SILVERMAZ -**ATLAS**

L.J. MODELS - DAPOL - WILLS LIFE LIKE - B.G.M.

Ian Lindsay Models & MORE

POINTS-TRACKS & ACCESS. PECO - ATLAS - SHINOHARA.

> FLUSH GLAZE WINDOWS KADEE

LOCOS-WAGONS & ACCESS.

AR KIT - POWERLINE - LIMA BACHMANN - REPLICA RAILWAY **HORNBY**

MASTERCARD BANKCARD AGC DINERS CARD AMERICAN EXPRESS

a.m.r.i.



kibri

WIKING.

IBESTREN

eda



a.m.r.i.

MODEL PARTS

Preiser











Chelling





Manufacturers' Agents and Wholesale Distributors

TRADE ENQUIRIES

P.O. Box 160, Broadbeach Old 4218, Australia Phone (075) 551422, Fax 61-75-551422



MODEL RAILWAYS OF AUSTRALIA

-		
Λ	c_{τ}	
$\boldsymbol{\mathcal{L}}$	\sim 1	

ACI		
CANBERRA CITY	HOBBY WORLD	062 48 7994
FISHWICK	FISHER DISCOUNTS	062 80 6638
HOLT	TOY & HOBBY JUNCTION	062 54 0809
LATHAM	LLOYD'S MODEL RAILWAYS	062 54 7958
WODEN	THE MODEL SHOP	062 82 4873

NSW METROPOLITAN

11011 111211101	O E I I I I I I	
CITY	HOBBYCO	02 29 7461
CITY	THE FANTASTIC MODEL SHOP	02 232 2318
BANKSTOWN	HOBBY & TOY CENTRE	02 709 6738
	PUNCHBOWL HOBBY CENTRE	02 709 5082
	CASTLE HILL HOBBIES	02 680 2976
CHATSWOOD	HOBBIES UNLIMITED	02 412 4238
DURAL	ABC DURAL CYCLES, SPORTS & TOYS	
EMERTON		02 834 1356
FRENCH'S FOREST	FOREST MINIATURES	02 451 1551
GORDON	JORDAL HOBBIES	02 498 3675
GYMEA	THE MODEL RAILWAY CENTRE	02 524 8855
HORNSBY	MICRO MODELS HOBBIES	02 476 2588
	JORDAL HOBBIES	02 622 1025
	CASULA HOBBIES	02 602 8640
MINTO		02 603 3242
NARRABEEN		02 913 1362
PARRAMATTA	BERG'S HOBBIES	02 635 8618
PENDLE HILL	WOODPECKER MODEL RAILWAYS	
PENNANT HILLS	NORTHSIDE HOBBIES	02 875 4487
PENRITH	PENRITH TOY & HOBBY CENTRE	
PENSHURST	PENSHURST SPORTS & TOYS	02 579 2062
RICHMOND	RICHMOND MALL TOY CENTRE	045 78 3205
ROSELANDS	GRACE BROS HOBBYCENTRE	02 750 1111
YENNORA	TOYMAN IMPORTS PTY LTD	02 632 5002

NSW COUNTR	Υ	
ALBURY	ALBURY TOY, HOBBY & CYCLE CENTRE	060 21 1564
ARMIDALE	MOORE PARK MODEL SUPPLIES	067 72 5971
BATEMAN'S BAY	HOBBIES & GAMES	044 72 6842
BATHURST		063 31 8122
DEC.A	BATHURST TOYWORLD TOYCO HOBBIES & TOYS NATURES TOUCH POTTERY	064 92 2301
	NATURES TOUCH POTTERY BOWRAL TOYWORLD CAMDEN TOYWORLD CESSNOCK TOYWORLD	048 77 1494
BERRIMA BOWRAL CAMDEN CESSNOCK CONISTON CONDOBOLIN COONABARABRAN		048 61 2038
CAMDEN	BOWRAL TOYWORLD CAMDEN TOYWORLD CESSNOCK TOYWORLD PAUL MACKS HOBBIES AND TOYS CONDOROUN COLOUR VISION	046 66 8383
CESSNOCK	CESSNOCK TOYWORLD	049 90 4772
CONISTON	PAUL MACKS HOBBIES AND TOYS	042 29 8394
CONDOBOLIN	CONDOBOLIN COLOUR VISION	068 95 2368
COONABARABRAN	RYDER BROS	068 42 1515
COORANBONG		049 77 2073
COWRA	CARAVAN CITY	063 42 2666
DUBBO	DUBBO HOBBIES	068 82 3644
DUNGOG	DUNGOG BAKERY, ARTS & CRAFTS	049 92 1861
ERINA	ERINA TOYWORLD	043 65 1131
FAIRYMEADOW	PLATFORM ONE	042 83 5800
GLENBROOK	THE JIGSAW	047 39 1742
GLENBROOK	WARD'S PHARMACY	047.39 1345
GLOUCESTER	BOWMAN MODEL RAILWAYS	
GOSFORD	BOWMAN MODEL RAILWAYS GOSFORD TOYWORLD JUNCTION HOBBIES	043 24 2135
GOULBURN	JUNCTION HOBBIES	048 21 8835
GOULBURN	MOUNTAIN ASH TOYS	048 21 8170
GOULBURN GOULBURN GOULBURN	JUNCTION HOBBIES MOUNTAIN ASH TOYS TOYWORLD INVERELL SPORTS & TOYS PLAY & LEARN SMELLIES TOYS & HARDWARE LEETON TOY & HOBBY CENTRE RAIL & BOAD	048 21 2333
INVERELL KATOOMBA KEMPSIE	INVERELL SPORTS & TOYS	067 22 3592
KATOOMBA	PLAY & LEARN	047 82 2090
KEMPSIE	SMELLIES TOYS & HARDWARE	065 62 4037
LEETON	LEETON TOY & HOBBY CENTRE	069 53 2141
LISMORE	RAIL & ROAD	066 21 6004
LEETON LISMORE LITHGOW LITHGOW MACKSVILLE	LITHGOW TOYWORLD	
LITHGOW	TOYS GALORE	063 51 4974
MACKSVILLE	MACKSVILLE TOYWORLD	065 68 1594
MINITERIAL	MAITLAND TOYWORLD	049 33 5034
	EUROMODEL DISTRIBUTORS	048 71 2966
	MORPETH NEWSAGENCY	049 33 6140
MURWILLUMBAH	JOYWORLD	066 72 1180
MUSWELLBROOK		
	NAMBUCCA VALLEY MODEL RAILWAY	065 68 7395
NEWCASTLE	ANGUS & ROBERTSONS	049 29 4601
NEWCASTLE NEWCASTLE NEW LAMBTON	FRONTLINE HOBBIES	049 29 1140
NEWCASTLE	NEWCASTLE TOYWORLD	049 26 3214
	VIC BARNES CYCLES & MODEL TRAINS	049 52 1886
NOWRA	NOWRA TOYWORLD	044 21 0962
ORANGE	DEAN MODEL RAILWAYS	063 62 1242
SINGLETON	SINGLETON TOYWORLD	
TAMWORTH	TAMWORTH HOBBIES & TOYWORLD	067 66 4658
TAREE	WONDERLAND TOYWORLD	065 52 2697
WAGGA WAGGA	WOODY'S	069 21 3203
WALICHORE	STATION MASTER MODEL RAILWAYS TRAIN MEADOWS	069 21 3414
WAUCHOPE		065 85 1293
	HAWKESBURY TOYWORLD WINGHAM TOYS & HOBBIES	005 50 5000
WINGHAM WINMALEE WOLLONGONG	TOY MOUNTAIN	065 53 5082
MOLLONGONG	EDN WEDD SOCOTS STODE	047 54 2900 042 29 1915
MYOMING	ERN WEBB SPORTS STORE WYOMING SPORTS TOYS & HOBBIES	
TT / OWING	TOWNED SPONTS TOTS & HOBBIES	040 20 42/1

TASMANIA

DEVONPORT	TOYWORLD DEVONPORT	004 24 862
HOBART	BIRCHALLS	
HOBART	MCCANN'S MODEL WORLD	002 349 01
LAUNCESTON	BIRCHALLS	003 313 01

WESTERN AUSTRALIA

FREMANTLE	HOBBYCRAFT	09 335 3838
PERTH	PERTH HOBBY CENTRE	09 322 3376
MT LAWLEY	STANBRIDGE'S HOBBIES	09 271 8929

NORTHERN TERRITORY

ALICE SPRINGS THE RED CABOOSE 089 52 3614

THERE'S A DEALER NEAR YOU...

VICTORIA METROPOLITAN

CITY	HEARNS HOBBIES	03 614 3603
CITY	HOBBY PLACE	03 663 2446
CITY	THE RAILFAN SHOP	03 619 4567
CITY	VICTORIA HOBBY CENTRE	03 650 4817
NTH MELBOURNE	BOXCAR HOBBIES	03 329 2560
BOX HILL	THE ENGINE SHED	03 890 7027
EAST BRIGHTON	BRITISH TRAIN SUPPLIES	03 578 4337
EAST BRIGHTON	TRAIN WORLD PTY LTD	03 596 3249
CROYDON	BRANCHLINE	03 723 1211
FRANKSTONE	ABC MODELS	03 783 4288
NOBLE PARK	W&G SELL VARIETY STORE	03 546 3704
NUNAWADING	METROPOLITAN MODELS & HOBBIES	03 894 1989
NTH BALWYN	ABRACADABRA	03 857 8858
MELTON	MELTON TOY & HOBBY CENTRE	03 743 7219
PRESTON EAST	BUFFER STOP	03 478 0038
RINGWOOD	WAYSIDE STAMPS & HOBBIES	03 870 0496
SYNDAL	HOBBYLINE	03 233 2398

VICTORIA COUNTRY

TIOTOTIIA OOG	214.111	
BAIRNSDALE	TOY SHACK	
BALLARAT	CHUCKLE CHARM BENDIGO SPORTS & HOBBIES	053 31 1642
BENDIGO	BENDIGO SPORTS & HOBBIES	054 43 5086
CASTLEMAINE	IRONHORSE HOBBY SUPPLIES	054 72 1973
COLAC	FINESCALE MODELS	052 31 4289
ECHUCA	REX KIGHTLY'S TOYS & HOBBIES	054 82 2437
EMERALD	EMERALD LAKE MODEL RAILWAY	
GEELONG	PHILLIPS TOYS PLUS	052 21 3907
GEELONG	NEWTOWN MODEL RAIL & HOBBIES	052 216268
GISBORNE	PJP PRODUCTIONS	054 28 2170
HEPBURN SPRINGS	HOBBY & MODEL SUPPLIES	053 48 3145
HORSHAM	WIMMERA HOBBY SUPPLIES	053 82 2319
LOCH	LOCH HOBBIES	
LONGWARRY	HOBBIES PLUS	056 29 9380
MOE	LATROBE VALLEY TOY WAREHOUSE	051 27 2797
MONBULK	APIA MISSION MODEL RAILWAY	037 56 6193
PORT ARLINGTON	BOXCAR HOBBIES	052 59 3521
PORTLAND	PORTLAND TOYWORLD	055 23 2893
ROSEBUD	ZIGZAG	059 86 8359
SALE	TOY KINGDOM	051 44 3417
TRARALGON	GIPPSLAND MODEL RAILWAYS	051 74 3468
WANGARATTA	BROSTERS TOYS & HOBBIES	057 21 8708
WANGARATTA	EL-JAYS HOBBIES	057 21 2716
WARRAGUL	710 710	056 23 1746
WARRNAMBOOL	WARRNAMBOOL TOYLAND	055 62 7362
WERRIBEE	DOVES TOYS & HOBBIES	037 41 2724
AACLUMDEE	DOVED 1010 & 1100DIED	

QUEENSLAND	METROPOLITAN	
CITY	BRISBANE HOBBIES	07 229 4495
CITY	HOBBY & TOYLAND	07 229 0453
BRISBANE	AUSTRAL MODELCRAFT	07 343 2138
CANNON HILL	TOYWORLD	07 399 7158
CHERMSIDE	TOYWORLD	07 359 8344
NUNDAH	THE TURNTABLE	07 266 4547
STRATHPINE	BILL WEBB	07 285 3883
VALLEY	VALLEY TOYLAND & HOBBY CENTRE	07 852 1005
WOOLLOONGARRA	GARRA HORRIES	07 844 7735

QUEENSLAND	COUNTRY	
BILOELA	BILOELA TOYWORLD MUSIC & SPORTS	079 92 1339
BOYNE ISLAND	WIZARDS TOY & GIFTS	079 73 7607
BROADBEACH	TRAINTASIA	075 55 2103
BUNDABERG	ZIG ZAG BUNDABERG	071 71 2326
CAIRNS	CAIRNS HOBBY CENTRE	070 51 2676
GLADSTONE	ZIGZAG	079 72 4405
GYMPIE	GRAYDONS SPORTS & TOYS	071 82 4248
IPSWICH	IPSWICH MODEL TRAINS	07 202 1040
IPSWICH	VOGLER & SON	07 281 1440
MACKAY	FAR NORTH HOBBIES	079 42 3910
MAROOCHYDORE	FUNTASTIC CYCLE & TOYLAND	071 43 5488
MARYBOROUGH	RONDEL TOYBARN	071 21 3120
MOOROOKA	J & J HOBBIES	07 277 4429 071 41 1669
NAMBOUR	NAMBOUR FUNTASTIC CENTRE	071 47 1889
NOOSA	NOOSA TOYWISE MALAN'S ART CRAFT & LEATHER	079 22 2488
ROCKHAMPTON TOOWOOMBA	TOOWOOMBA TRAINS & TOYS	076 38 5591
TOOWOOMBA	DOWNS HOBBY SUPPLIES	076 38 5322
TORQUAY	TOYWORLD	071 25 2540
TOWNSVILLE	WAYNE'S TRAINS	077 71 2651
TOWNSVILLE	ZIGZAG	077 79 0277
WARWICK	AUDIVISION	076 61 3131
WOLFFDENE	THE TRAIN PLACE	075 46 4221
**OLI I DLIVE	THE THE STATE OF	

SOUTH AUSTRALIA

SOUTH AUSTR	IALIA	
CITY	MODEL CENTRE	08 212 3933
CITY	MODEL WORLD	08 223 1642
CITY	SOUTH AUSTRALIAN HOBBY CENTRE	08 232 0080
BLAIR ATHOL	HOBBY HABIT	08 349 6242
CLARE	CLARE TOY & HOBBY CENTRE	088 42 3623
MILLICENT	MILLICENT TOY KINGDOM	
MT BARKER	GRAHAM'S CORNER	08 391 0451
PORT ADELAIDE	PORT TRANSPORT BOOKS & MODELS	08 341 1237
PORT AUGUSTA	PORT AUGUSTA ZIG ZAG	086 42 3277
ST MARYS	THE MODEL TRADING POST	08 276 1863
SALISBURY	MODELS & HOBBIES	08 250 2850
SALISBURY PLAINS	A TO Z MODELS	08 258 4485
UNLEY	A TO Z MODELS	08 373 1191
WHYALLA NORRIE	WEST COAST MODEL SUPPLIES	086 45 0679

Trade Enquiries to:
POWERLINE MODELS P/L - PO BOX 264, PENRITH NSW 2750
PHONE: 047 215 915 FAX: 047 396 260
ALSO AVAILABLE TO THE TRADE FROM: RAILCO - BRISBANE 07 269 8127

ICTORIAN HO SCALE MODELS



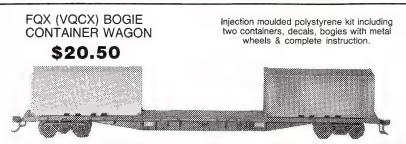
V.R. E Class 0-6-2 kit re-run \$275.00 Due Mid February 1990



ACCURATELY DETAILED REPLICAS FOR THE DISCERNING V.R. ENTHUSIASTS

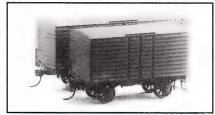
BROAD GAUGE MODELS PTY LTD P.O. BOX 136, BORONIA, VIC. 3155. (03) 801 9951 Reg Office: 511 Mt Dandenong Rd. Kilsyth

AVAILABLE FROM YOUR LOCAL HOBBY SHOP OR DIRECT FROM B.G.M.





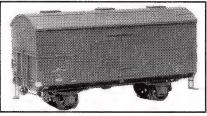
INJECTION MOULDED POLYSTYRENE KITS VICTORIAN RAILWAYS... HO SCALE.

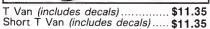


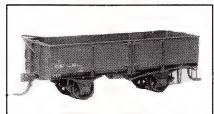




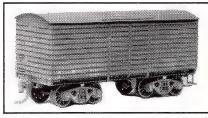
Narrow Door U Vans \$21.50 NOTE: ALL KITS COME COMPLETE WITH METAL TYRED WHEELS.



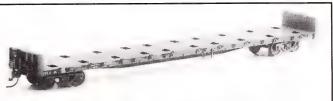




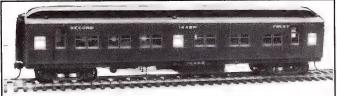
Open Wagon (includes decals).. \$10.00 IY Open Wagon (includes decals) \$10.80



UB Bogie Louvre Van (includes bogies & wheels) \$13.60



\$17.55 SFX Flat Bogie Wagon



(Passenger cars include Delrin bogies, Interior Detail & Decals)

SEND COUPON FOR FREE B.G.M. CATALOGUE AND PRICE LIST

FOR RANGE OF B.G.M. PRODUCTS REFER TO LAST ISSUE OF A.M.R.M.

	ORDER ORM	SEN	ND T	_			UGE 136					СТС	RIA	- .	' 155
1	Pleas Pleas 	e se	end 	me	(BL	OCK	LE (Mo	TTE del l	RS I Kit)	PLE. (Qty	ASE	:))	\$		
R C	ostage l encl	e &	pack che	kagi eque	ng 5 e/me	one	y or	der	for ((tota	al) \$				
					Ī										
1	<i>xpiry dat</i> Name: Addres														
	Teleph Signatu														

RAIL 'N' THUSIAST

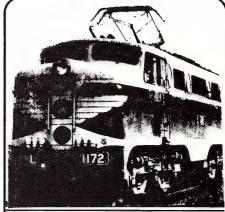
Open M-T 9.00-5.00 Fri. 9.00-9.00 Sat. 9.30-4.30

A Sample of our 'N' Range

Con Cor	\$ c	Kadee	\$ c
40' Reefers	7.00	Boxcars	from 9.90
50' Grain	8.20	Flat Cars	from 9.70
Fuel Foilers	37.60	Tank Cars	from 16.00
SD40-2/SD50 S.P., S.F.	69.85	Bulkhead Flats CP, SSW, CLC, TT, SP, BN	/ 14.80
Add on up Freight Set	96.00	1000 Trucks	5.15
SW1500 Cow S.F., G.N.	73.40	Kato	
E7A-A Set P.R.R.	115.00		05.00
E8A C. & O., S.P.	84.50	GP38-2 MP, CP, MILW GP50 MP, UP, CNW, SF, Undec.	85.00 89.00
Atlas			0,100
	6.50	F3 A&B UP, SP, Undec.	pair 165.00 each 86.00
40'Plug, Stock, Gondola	7.00	U30c	91.00
3 Bay Hopper Centreflow Hopper	8.00	Chessie, RI, D&H, BN, PRR, SBD	91.00
RS3	from 70.00	Plus 2 #s - UP, SF, SP	
RS11 BN, CL, L&N etc	70.00	SD40-2 July Release	Approx. 95.00
GP7/9	85.00	3D40-2 July Release	Арргох. 95.00
ACL, B&O, UP, CB&O, D&RGW, GN	05.00	MDC	
NH, SF, PRR, MKT, NW, NYC		50' Anniversary Car	8.75
U25B	95.00	Mill Gondolas	6.20
SF. UP. CON. BN. SBD. RI. Undec.	75.00	50' DD Pend Oreille, Milw	7.25
C&O, WAB, NYC, GN, CB&O - all 2 #s		50' DD Plug SF	7.40
SD7 DRGW, SP, B&O, GN	95.00	Bachmann	
SD9	95.00	F9	28.00
PRR, CONR, CB&O, N&W, SRR	75100	GP40/U36B	31.00
		GP50	33.00
Trix		Tank Cars, Box, Stock	4.20
Fairbanks Morse	70.00	Tank Cars, Box, Stock	4.20
U28	79.60	A few of our HO specials	
Specials		Kadee #5	4.50
Atlas/Kato GP50 SF	81.00	Kadee #4	3.95
Atlas/Kato RS1 Any Road	2 for 165.00	Athearn Kits	from 5.60
Atlas 90 Ton Hopper UP	5.95	MDC Kits	from 9.10
Attus 70 Toll Hopper Of	3.93	ML Bridges	9.60
Also Large Range of Pre-loved Locos &	Rollingstock	Mail Order Welcome	

680 Canterbury Rd, SURREY HILLS 3127

Phone (03) 890 6365 A.H. (03) 762 5030



Shop 5/39 Princes Highway, WARRAGUL. 3820. Phone (056) 23 2203

> POSTAL ADDRESS c/- Post Office LONGWARRY. 3816

Deposits of \$20.00 minimum are now being taken for Northern Models' epoxy resin body kit of Vic-torian Railways L class electric locomotive.

Post free mail order on British models, British books and all railway videos (260 titles in stock). If we haven't got it we can probably get it.

NOTICE

During my most recent burglary my card index, giving particulars of mail order transactions, was stolen. I am therefore without particulars of many people's orders, as well as names and addresses.

If anybody ordered anything, including catalogues, before Christmas and has not received them, will they please contact me.

PORT TRANSPORT BOOKS & MODELS

103 St Vincent St, Port Adelaide, 5015 Phone: (08) 341 1237

BANKCARD

VISA

MASTERCARD

Model Railway Exhibition

Queen's Birthday Long Weekend

9, 10, 11 June 1990 10am to 5pm each day

Meadowbank College of TAFE Rhodes Street, Meadowbank

There's something for everyone

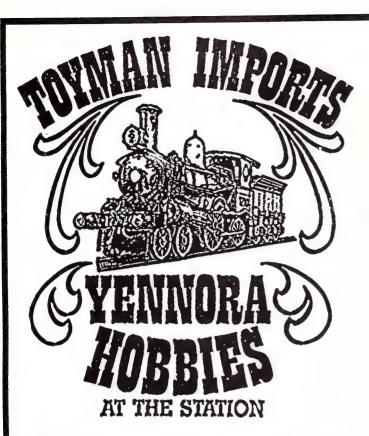
- Second-hand stall
- Thomas the Tank Engine You-Drive
- Models and layouts from Z scale to 1:1
- Refreshments, hobby shops
- Railway videos

Admission:

Adults \$3 Children \$1

Families \$8

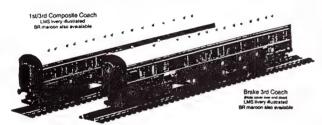
Organised by the Epping Model Railway Club Incorporated



We are 20 years old this year and only getting better so for the best range and price be sure to look us up.

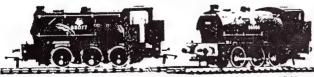


STANIER LMS 57FT CORRIDOR COACHES



DAPOL MODEL RAILWAYS

- BRITISH PROTOTYPE
- OO SCALE
 HIGH ACCURACY
- FINE DETAIL
 TOP PERFORMANCE





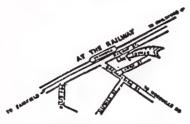






POWERLINE DEALER

FRIEDMONT MODELS



Two new kits \$10.95 each



VICTORIAN ERA COTTAGES





V-1 School

V-2 Hall

\$795 V-3 Church





OPPOSITE YENNORA RAILWAY STATION ON THE WOODVILLE RD SIDE 76 RAILWAY STREET, YENNORA 2161

TOYMAN IMPORTS PTY.LTD.

76 Railway Street, Yennora N.S.W. 2161 Phone (02 632 5002 or Fax (02)632 7478 A MEMBER OF THE

HobbyPro

CROLIP OF DIDEPENDENT HOBBY SHOPS

a.m.r.l. MODEL PARTE

PRCO

VOLLMER SUPERDUICK

HOJOO Plastic Kits

ROMFORD

märklin **ARIVAROSSI**

FAILER

KIBBII

LIMA (PDLA)

Drills and Taps FLEISCHMANN DATA SWITTER

Limodels HO ROAD SIGN KITS









N-TRAINS



MARKET PLACE

COMMERCIAL: \$5.00 per line, minimum of \$15.00 Continuous or Advance insertions not guaranteed.

PRIVATE: 33 cents per word, name, address and phone number free. Minimum \$3.50 per insertion. Continuous insertions not guaranteed. All moneys must accompany copy, which must be supplied written clearly. Phone insertions not accepted.

Send all copy and payment to SCR Publications, PO Box 4, LITTLE BAY, 2036. All copy must be received by advertising deadline for the issue required. (Advertising Deadlines listed on page 12.)

COMMERCIAL

FOR SALE

MERLIN Gauge 1 Live Steam. Send SSAE for details to Steamline Locomotives, 5 Diamond St, Preston, 3072.

PRIVATE

FOR SALE

LNER SUBURBAN COACHES (lan Kirk's), 1st/3rd, full 3rd, brake 3rd, beautiful teak finish, 3 link couplings - \$45 ea. LNWR composite coach, fully painted and lined - \$45. Kit built locos, Midland 2P (Millholme) - \$120. LMS George the 5th (Gem) \$120. LNER J6 (Nucast) - \$100. LNER J27 (Nucast) - \$100. LNER A6 (Craftsman) - \$120. LNER A8 (Craftsman) - \$120. All have MRRC 5 pole motors, Romford wheels and gears, airbrushed and numbered. Photos available. R.Bianchi, 12 Cleary St, Toowoomba, 4350. Phone (076) 35 0849.

O GAUGE collection, tinplate, brass and plastic locos, wagons and carriages. Yank, Japanese, Pom, Victorian and NSW. SAE for details to: A. Higgins, 14 Hiron St, St Lucia, 4067. Phone (07) 870 7802

BICENTENNIAL 81 Class No.8172. Limited Edition Powerline model complete with Certificate of Authenticity. Guaranteed Virgin model still in box. Regrettable sale. Best offer. Write to P. Allen, C/- Romac Pipefittings, PO Box 1395, Mulgrave Nth,

MARKLIN M - Tracks, points, signals, turntable and much more, worth new over \$7000 - sell for \$3300. Will break up. Also rollingstock, price separate. Phone (042) 75 5814 after 11am and before 7.30pm.

NSWGR BRASS 3rd run Dockyard 60 class, prof. painted/weathered - \$1200; Bergs 1st run 48 class, prof. painted/weathered - \$400; Bergs 30T, mint, unpainted - \$400 (will paint if desired). Reasonable offers will be considered. Phone Steve (059) 62 3627.

BERGS 2nd run 36, Belpair, unpainted, test run only - \$675; Trax 12, painted, test run only - \$600; Bergs 2nd run 30 Tank - \$275. Phone Ron (02) 543 1415.

'SNAKE RIVER CANYON' N scale exhibition layout 8.0m x 2.0m, 7 modules. Complete with DC supply & controllers. Winner of Best N Gauge at Liverpool Exhibition - \$2000. Phone:

Roger Hord (02) 634 1283. 3½ GAUGE 4-4-0 'Maisie'. Approximately 80% complete. Reasonable offer. Phone: (049) 52 3738.

BERGS 1st run C32, D50 (2), 30T (2) mint, 48 (2) and 30 tank, all only test run. Workshop 5, Protype and Aussi kits plus other interesting pieces. Offers (046) 81 9019.

CLASSIC BRASS NSW 80 class, painted, test run only - \$825. Phone: (043) 28 1529.

NSW BRASS Mansfield 442 and 45 classes - \$800 ONO each or \$1500 together. Martin Sparke, phone (02) 725 6897 weekdays, (049) 71 2757 weekends.

BRASS BGM K class, painted - \$1100; BGM A2 class, painted - \$1100, both excellent condition. Alco 'Flat Top' T class, painted - \$695, vgc. Phone: (059) 44 3274 after 7pm

BERGS C36 roundtop, unpainted, mint, test run only Phone (03) 589 2954.

BGM BL class, painted AN - \$860; BGM C class, painted VR Blue/Yellow - \$860. Both models are in mint condition, test run only. Phone Len (02) 953 5703 ah.

MAMOD steam set, minimal use, boxed, Green loco - Gas fired by Merlin Unit gives much improved performance, 2 trucks and track - \$275; detailed wood station for above - \$40; Rivarossi 'O' scale DB 0-6-0T kit including motorising kit - \$175; Marklin 'O' scale NG 16.5mm 0-6-0T green - \$100. Phone John Niven (03)755 1333 evenings and W/E.

'O' SCALE Disposal of mainline and modern outline American collection, includes brass locos, Atlas, Weaver, AHM and Craftsman locos and rollingstock, kits and RTR. Approx. 100 items. For detailed list phone John Niven (03) 755 1333 evenings and W/E or SAE to Kiah, Macnamara St, Ferny Creek, 3786. MARKLIN #3355 E.Lok Digital - \$350; Roco Glaskasten loco & coaches - \$250. Brand new, never run. Phone B. Redsell (03)

BRITISH & AMERICAN 24 locos, 22 coaches, 40 wagons, all new. Flying Scotsman - \$130; Replica BI - \$130; Mantua 2-6-6-2T - \$180. SAE for full list to Mike Mallett, 146 Suncoast

762 5757

Beach Drive, Mount Coolum, 4573. Phone (071) 46 3156. HO SENTINEL Z20 loco, assembled, black, test run only; Rivarossi SNCF Pacific, black, w/ball-bearing motor, done very little work. N GAUGE - 1. Sentinel C38, assembled, Green. 2. Arnold Rapido Pacific, Southern, Green. 3. Minitrix Britannia, Green. 4. Sekasui/Con-Cor (Kato) S.Fe Co+Co Diesel, Blue/Yellow, both trucks powered. 5. Peco Saddle Tank Body Kit assembled & mounted on Arnold chassis 0-4-0, Green. 6. Atlas (Riv.) DB Diesel Bo+Bo, Red/Silver (minus buffers at one end). 7. Graham Farish 0- 6-0 Tank Loco, Southern, Green. 8. 6 Minitrix BR Maroon Pass. Cars (suit Britannia). 9. Atlas SP Pass. Cars (lighting removed) - 2 coaches, 1 baggage/dorm, 1 tail car, 2-tone Orange. 10. Lima 4 SNCF Bogie Pass. Cars, Green/Grey w/Silver roofs. 11. Lima 2 4- wheel Open Wagons, Brown, 4-wheel Reefer, White. 12. Minitrix 4- wheel MIELE Van, Brown w/Silver roof, 13. Atlas DSG Sleeper (minus 1 coupler). 14. Atlas B&O Coach, Blue. 15. Sentinel 1ft radius Points NT-1 LH 6 only, still in original pks. GENERAL - H&M Duette Power Pack; Eda 1 amp Inertia Throttle w/brake; Peco Point Motors

to: Jim Grant, PO Box 9, Albury, NSW 2640 or phone (060) 25 DOCKYARD 38 unpainted, Mansfield S/L 38, Mansfield 45 painted, Berg's 73 unpainted. Phone Garry (063) 62 6008.

(metal framed type but no extension rods) in pks 5 only. None

of these locos have done a lot of work - some just run in. Offers

WANTED

6780 after 6 30nm

ENGLISH - unmade loco kits. For details - R. Bianchi, 12 Cleary

St, Toowoomba, 4350. Phone (076) 35 0849.

PRE-LOVED FLEISCHMANN for private collection. HO and O Gauge. Please write or phone Marj Webb (048) 71 2966. PO Box 388, Mittagong, 2575.

STEPHEN JOHNSON Creamy Kate & 400 class diesel kits. Must be complete and in good order. Phone Fred (02) 639 4158 with price & details.

BANGOR and Aroostock boxcars/reefers, red/white/blue, Maine potatoes/produce caboose to match. John Hudson, Box 99, Lawson, 2783. Phone (047) 59 1572.

PROTYPE Z19 and Z12 built up or kit, also Bergs Station. Phone B Fox (071) 93 2251

GOOD CLEAR PHOTO of Bogie Hearse Van BKE to assist in building model. Phone Fred (02) 639 4158 for details. AUSTRALIAN Triang and Australian Hornby. B.Y. Watts, 104 Morgan Ave, Melrose Park, 5039. Phone (08) 277 4973.

The Great Little Train Show

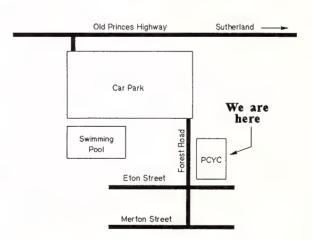
Model Railway Exhibition

Presented by Sydney N Scale Model Railway Club.

21st/22nd April 1990

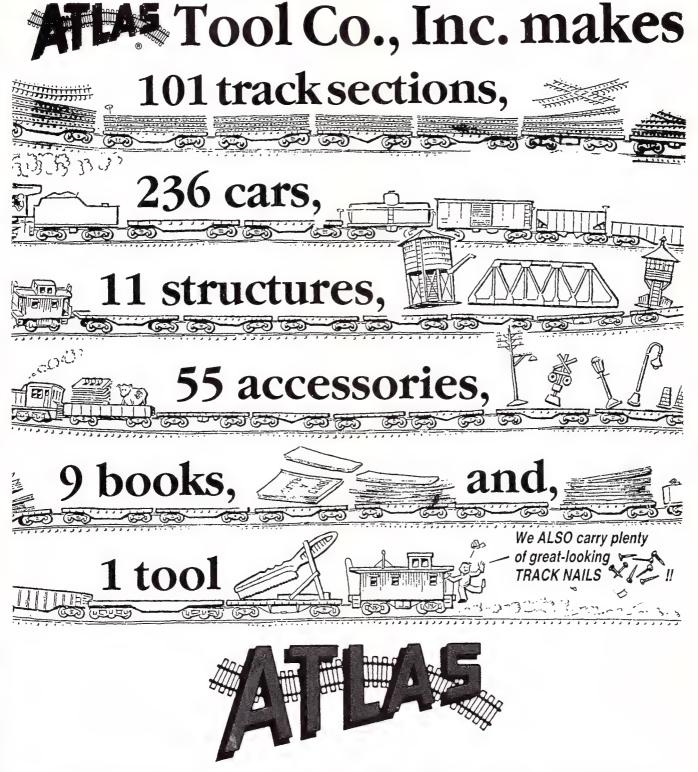
At the Sutherland Police Citizens Youth Club Corner of Forest and Eton streets Sutherland

> Open 11am till 8pm Saturday 10am till 5pm Sunday



Layouts in OO, HO, N & Z. Trade stands, Second hand stall

Admission \$3.00 Adults, \$1.50 Child/Pensioner, \$8.00 Family of 4, Children under 5 free For Information Call Michael Chellew (02) 521-1792 or Len Newland (02) 600-9274 After hours.



CHECK THE ATLAS RANGE OUT AT YOUR LOCAL RETAILER.

FOR TRADE ENQUIRIES ONLY:-

J. & D. TOY IMPORTS
P.O. BOX 18, ENFIELD SOUTH 2133
N.S.W. AUSTRALIA

Telephone (02) 708 6751

FAX (02) 790 2886

AUSTRALIAN HOBBY CENTRES

LIFE LIKE HO

ATHEARN HO

ATLAS HO

Assorted Road Names

BACHMANN HO

each \$4.99

Cahooses

44.00

46.00 49.95

49.95

49.95 49.95

49.95

49.95 49.95

49.95

49.95

49.95 49.95

59.95

89.95

89.95

99 95 119.95

115.95

110.00 110.00 110.00 19.95

79.95 69.95

109.00

59.95

ea 6.99

VICTORIA

1st Floor, 21A Swanston Street, Melbourne. (03) 650 4817

SOUTH AUSTRALIA

1st Floor, 135 Rundall Mall, Adelaide. (08) 232 0080

WESTERN AUSTRALIA

385 Murray Street, Perth. (09) 322 3376



385 Murray	/ Stre	eet, Pertn. (09) 3	22 33/6
R	VARO	SSI HO		FLEISCHMAN
-3-				Locomotives Continued 4229 DB BR212 Diesel 4230 DB BR212 Diesel 4231 DB BR212 Diesel 4234 DB BR218 Diesel 4235 DB BR221 Diesel
	HO 6	CALE		4237 DB BR218 Diesel 4239 DB BR218 137 Diesel
Locos 4-8-8-4 Big Boy	поз	2 Truck Heisler Coaches	259.95	HO Coaches 5000 Baggage Car
1254/2 Black/Silver 1245/3 Black/Grey 4-6-6-4 Challenge	399.95 399.95	Most Road Nam 1920 Series RPO	nes ea 29.95	5001 DB Coach 2 axle 5002 DR C1 Bay 10 5003 DR type Cv33 3rd
1200 Black UP Grey 4-8-4 FEF3	399.95 399.95	Combine Coach Pullman	ea 29.95 ea 29.95 ea 29.95	5005 DR Pw1 29a Baggage C 5067 DR CC rtr Pro05b 3rd 2 5069 DR type C1Pr05 3rd
Black UP Grey UP Cab Forward 4-8-8-		Diner Duplex Sleeper Observation	ea 29.95 ea 29.95 ea 29.95	5119 DB Bcm247 2nd Couche 5123 DB BDnrzf City
SP Heavy Pacifics Asst Road Names Mikado 2-8-2 - Great Northern Hudson's Streamlin		Baggage Express Add \$5.00 for inte 1930 Series Baggage RPO Coach	ea 29.95 ea 29.95 ea 29.95	5124 DB ABnrzb City 5125 DB Bnrzb City 5127 DB BDyg 2nd Bagg 5128 DB AByg 1/2nd 5129 DB Byg 2nd 5189 DB Post mrz
NYC Mallet 2-8-8-2 N & Western E8 Diesels Power & Dummy	269.95 375.95 189.95	Pullman Diner Vista Dome Duplex Sleeper Tail Car	ea 29.95 ea 29.95 ea 29.95 ea 29.95 ea 29.95	5190 DB Dms Luggage 5191 DB Am 203 1st 5194 DB Bpmz 2nd HO Goods Wagons 5201 DB Boom Support
SP	ECTP	UM HO		5202 DB Spacer Car 5203 DB C1 020 Gondola 5205 DB Omm Gondola
		NION PACIFIC		5206 SNCF Gondola 5207 SNCB Gondola 5208 DR 020 Open 5210 DB K25 Wagon 5520 Hopper Class FAD 5521 DB Fals Hopper 5525 DB Hopper 626 5569 Track Cleaner
GE 44 Ton Switcher Southern Rio Grande Great Northern	All \$49.95	Dash 8-40c Illustrated Abov Orders taken Union Pacific	<i>re</i> ea 84.95	00/H0 Profi Track 6101 Straight 200mm 6102 Straight 105mm 6103 Straight 100mm
Southern Pacific Coaches - Pennsylvania Combine	each	Norfolk Southern EMD GP-30 Reading	ea 84.95 49.95	6106 Flexible 800mm 6113 Elec Uncoup & Mast 6114 Manual Uncoupler 6116 Buffer Stop
Coach Diner Observation	\$35.00 each	K-4 Pacific PRR 4-6-2 Loco	129.95	6117 Buffer Stop 6120 Curve R1 6122 Curve R1 18°
	LIMA	НО		6125 Curve R2 6138 Curve R647mm 6170 Manual Point L/H 6171 Manual Point R/H
			ا ا	6172 Elec. Point L/H 6173 Elec. Point R/H 6174 Curved Man. Point L/H 6175 Curved Man. Point L/H 6176 Curved Elec. Point L/H 6177 Curved Elec. Point R/H 6150 Manual Turntable 6151 Supp. set for 6150
Locomotives (Detailed) 44 Class, GMs (Silver/Red) 422 (Tuscan or Candy) 5 Class (V/Lne) C38 Class 4-6-2 Locomotives (Not Detailed GMs, 44 Class (ANR Green V/Line \$ Class	79.95 69.95 129.95	Coaches 9126, 9127 (Not Det'led All other Aussie Coaches Wagons GYs ANR Gondolas (Green) BP Tanker VR Covered Van		6151 Supp. set for 6150 6152 Elec. Turntable 6153 Supp. set for 6152 6157 Man 3-way Point 6158 Elec. 3-way Point 6160 Crossing 36' 6162 Crossing 18' L 6163 Crossing 18' R 6164 Double Slip Man L
		INE HO		6165 Double Slip Man R 6166 Double Slip E1 L

					4234 DB BR218 Diesel 4235 DB BR221 Diesel
	The state of the s	- 11. [F. 18]			4237 DB BR218 Diesel
		HO S	CALE		4239 DB BR218 137 Die HO Coaches
i	Locos 4-8-8-4 Big Boy		2 Truck Heisler Coaches	259.95	5000 Baggage Car
	1254/2 Black/Silver	399.95	Most Road N		5001 DB Coach 2 axle 5002 DR C1 Bay 10
	1245/3 Black/Grey 4-6-6-4 Challenger	399.95	1920 Seri RPO	es ea 29.95	5003 DR type Cv33 3rd
	1200 Black	399.95	Combine	ea 29.95	5005 DR Pw1 29a Bagga
	UP Grey 4-8-4 FEF3	399.95	Coach Pullman	ea 29.95 ea 29.95	5067 DR CC rtr Pro05b 3
	Black UP	375.95	Diner	ea 29.95	5069 DR type C1Pr05 3i 5119 DB 8cm247 2nd C
	Grey UP Cab Forward 4-8-8-		Duplex Sleeper Observation	ea 29.95 ea 29.95	5123 DB BDnrzf City
	SP Heavy Pacifics	375.95	Baggage Express Add \$5.00 for i	ea 29.95	5124 DB ABnrzb City
	Asst Road Names	249.95	1930 Seri	es	5125 DB Bnrzb City 5127 DB BDyg 2nd Bagg
ļ	Mikado 2-8-2 - Great Northern	289.00	Baggage RPO	ea 29.95 ea 29.95	5128 DB AByg 1/2nd
1	Hudson's Streamline	ed	Coach	ea 29.95	5129 DB Byg 2nd 5189 DB Post mrz
ı	NYC Mallet 2-8-8-2	269.95	Pullman Diner	ea 29.95 ea 29.95	5190 DB Dms Luggage
ı	N & Western	375.95	Vista Dome	ea 29.95	5191 DB Am 203 1st 5194 DB 8pmz 2nd
ı	E8 Diesels Power & Dummy	189.95	Duplex Sleeper Tail Car	ea 29.95 ea 29.95	HO Goods Wagons
l		_	THE PERSON NAMED IN		5201 DB Boom Support 5202 DB Spacer Car
ı	OF.	EUIF	RUM HO		5203 DB C1 020 Gondol
ı	* - *				5205 DB Omm Gondola 5206 SNCF Gondola
ı		. 8:	NION PACIFIC	ire	5207 SNCB Gondola
	4100 ==				5208 DR 020 Open 5210 DB K25 Wagon
I		- N			5520 Hopper Class FAD
I		Salara Salara			5521 DB Fals Hopper 5525 DB Hopper 626
ı	05.44.7				5569 Track Cleaner 00/H0 Profi Track
ı	GE 44 Ton Switcher Southern		Dash 8-40c Illustrated A	bove	6101 Straight 200mm
i	Rio Grande Great Northern	All \$49.95	Orders tak		6102 Straight 105mm 6103 Straight 100mm
I	Southern Pacific	each	Norfolk Southern	ea 84.95	6106 Flexible 800mm
l	Coaches - Pennsylvania Combine		EMD GP-30 Reading	49.95	6113 Elec Uncoup & Ma: 6114 Manual Uncoupler
l	Coach	All	K-4 Pacific PRR		6116 Buffer Stop 6117 Buffer Stop
١	Diner Observation	\$35.00 each	4-6-2 Loco	129.95	6120 Curve R1
		LIMA	НО		6122 Curve R1 18° 6125 Curve R2
ĺ	1				6138 Curve R647mm
l			The same of		6170 Manual Point L/H 6171 Manual Point R/H
l					6172 Elec. Point L/H 6173 Elec. Point R/H
l	V E		ine C	ı	6174 Curved Man. Point
l					6175 Curved Man. Point 6176 Curved Elec. Point
l	47		16	Ţ	6177 Curved Elec. Point
l		- 4			6150 Manual Turntable 6151 Supp. set for 6150
l	Locomotives (Detailed) 44 Class, GMs (Silver/Red)	69 95	Coaches 9126, 9127 (Not Det'l	led)ea 13 95	6152 Elec. Turntable 6153 Supp. set for 6152
l	422 (Tuscan or Candy)	79.95	All other Aussie Coacl		6157 Man 3-way Point
Į	S Class (V/Line) C38 Class 4-6-2	69.95 129.95	Wagons GYs	8.99	6158 Elec. 3-way Point 6160 Crossing 36°
l	Locomotives (Not Detailed		ANR Gondolas (Green	1) 15.99	6162 Crossing 18° L
l	GMs, 44 Class (ANR Green) V/Line S Class	47.95	BP Tanker VR Covered Van	18.99 15.99	6163 Crossing 18° R 6164 Double Slip Man L
	PO	WERI	INF HO		6165 Double Slip Man R
	Locos Motors - single or	dual	Wagons	•	6166 Double Slip E1 L 6167 Double Slip E1 R
l	81 class (SRA) \$89.99 \$	109.95	Hoppers:	700	HO Signals 6200 Distant Signal
l		109.95 109.95	BHP, AI&S, ANR Containers:	ea. 7.99	6201 Semaphore Signal
l	Coaches:		RACE, ANR, Trackfas		6205 Semaphore Signal 6206 Semaphore Signal
l	FS, BS, BSR, MHO, KB, etc. P400, P401, P402, P420, P	441,	QR - RACE, V/Line Tankers:	ea. 10.99	6221 Distant Signal
l	P461, P421, P422, P424, P P460, P444 all each		ESSO, Ampol, Caltex		6226 Home Signal
	-	-	MANN HO	ea. 11.99	WALTHER
	HO Locomotives			au ad	Walthers Catalogues HO Catalogue 1990
	4000 Black Anna Steam	65.00	HO Locomotives Contin 4139 DR BR39 2-8-2 S	Steam 315.00	N&Z Catalogue 1990
ı	4010 DR BR89 Steam	159.00	4156 DR BR56 (ex Pr 0	G8) Steam	Large Scale
l	4020 DR BR89 Steam	102.00 149.00	4157 DB BR56 Steam	239.00 239.00	MONOGRA
	4028 Green Charlie rack Stea	am 168.00	4160 DR BR38 Steam 4162 DB BR38 Steam		HO 1/87 CARS
	4063 DR BR64 Steam	189.00		245 00	69 Mustang Boss 57 Chevy
		167.00 239.00	4169 DB BR01 4-6-2 S 4172 DR BR03 Steam	team 287.00 209.00	F-40 Ferrari Lambo Countach
		189.00	4173 DR BR03 Steam		Testorossa Ferrari

3	22 3376		
	FLEISCHMAN	IN	LIFE LIKE
	Locomotives Continued		HO Wagons
	4229 DB BR212 Diesel	159.00	From \$5.85
	4230 DB BR212 Diesel 4231 DB BR212 Diesel tube	139.00	Tankers
	4231 DB BR212 Diesel tube	139.00	Box Cars (wood)
	4234 DB BR218 Diesel 4235 DB BR221 Diesel 4237 DB BR218 Diesel 4239 DB BR218 137 Diesel	159.00	Stock Cars
	4233 DB BR221 Diesel	168.00	Condolas
	4239 DB BR218 137 Diesel	165.00	Reefers
	HO Coaches	100.00	Hoppers Coal
)	5000 Baggage Car	10.95	Hoppers (covered)
	5001 DB Coach 2 axle	10.95	ATHEADN
	5002 DR C1 Bay 10	13.95	
5	5003 DR type Cv33 3rd	13.95	Assorted Road N
5	5005 DR Pw1 29a Baggage	Car	EMD F7
5	EGG7 DD CC etc DrogEb 2rd	14.50	SW7
	5067 DR CC rtr Pro05b 3rd 5069 DR type C1Pr05 3rd	20 05	GP9, GP35 Continued
5	5119 DB Bcm247 2nd Couc	hette	SDP-40
5	0110 00 00112 17 2110 0000	48 95	CD 45
2	5123 DB BDnrzf City	04.90	F-45
)	5124 DB ABnrzb City	39.00	FP-45
	5125 DB Bnrzb City	39.00	S-12 Baldwin
5	5127 DB BDyg 2nd Bagg		
5	5128 DB AByg 1/2nd 5129 DB Byg 2nd	33.00	CE HOOD
5	5189 DB Post mrz		
ò	5190 DB Dms Luggage	38.00 38.00	U338
5	5191 DB Am 203 1st	34.00	CD O
	5194 DB Bpmz 2nd	34.00	SD40-2
	HO Goods Wagons		Wagons, Coaches from
	5201 DB Boom Support	15.95	
ı	5202 DB Spacer Car	15.95	ATLAS H
	5203 DB C1 020 Gondola	15.95	RS-3 Diesels RS-11 Diesels
	5205 DB Omm Gondola 5206 SNCF Gondola	15.50	RS-11 Diesels
	5200 SINCE GOLIUDIA	16.50	RS-12
	5207 SNCB Gondola 5208 DR 020 Open	15.95	Alco C424 Alco C425
	5210 DB K25 Wagon	18.95	Alco C425 RS-1 Assorted Road N
	5520 Hopper Class FAD	15.50	RS-1
	5521 DB Fals Hopper	20.95	
	5525 DB Hopper 626	29.95	BACHMANI
	5569 Track Cleaner	32.95	4-8-4
	00/H0 Profi Track 6101 Straight 200mm	2 20	UP Overland
	6102 Straight 105mm	2.30	J Class NEW
	6103 Straight 100mm	2.20	J Class NEW GS-4 Southern
	6106 Flexible 800mm	7.95	Burlington Northern
	6113 Elec Uncoup & Mast		Candy Dancers
	6114 Manual Uncoupler	8.40	2-8-0
	6116 Buffer Stop	5.80	2-6-2 2-8-2 Old Time 4-4-0
	6117 Buffer Stop	4.60	2-8-2 Old Time 4-4-0
	6120 Curve R1		GP50
ı	6122 Curve R1 18° 6125 Curve R2	3.10	F9
ĺ	6138 Curve R647mm	3.00	GP40
ı	6170 Manual Point L/H	19.95	U36B
	6171 Manual Point R/H	19.95	F-40 Amtrack
1	6172 Floo Point I /H	21.05	DD40X LIP

WALTHERS

MONOGRAM

We stock a large rang of HO & N scale

Testorossa Ferrari

	2.60 3.10 3.00 19.95 19.95 31.95 31.95	GP40 U36B F-40 Amtrack DD40X UP SD-402	29.95 33.95 33.95 37.95 59.95
ı	23.95 23.95	LIMA OO	
	36.95	Locomotives	
	36.95	English 00 New	
	45.00	Diesels, all new colours and	new
	12.95	numbers Please enquire:-	
2	279.95		n 69.95
	19.95	01033 07	n 69.95
	44.50 68.95		n 75.95
	13.00	01400 10	n 79.95
	16.95	01000 47	n 69.95 n 59.95
	16.95		n 69.95
	49.95	01000 10	n 69.95
	49.95	RATIO OO	100.00
	59.95	HATIO OU	
	59.95	Operating Signals	
	39.95	460 GWR Home Signal	14.00
	49.95		15.00
	39.95		15.00
	49.95	463 GWR Fixed Distant Signa 469 GWR Junction/bracket	
	29.95	470 LMS Home Signal	14.00
	25.95	471 I MS Distant Signal	14.00

49.95	463 GWR Fixed Distant Signa	1 7.00
29.95	469 GWR Junction/bracket	14.00
	470 LMS Home Signal	14.00
25.95		14.00
3	490 SR Rail Post Home Kit	11.00
	491 SR Rail Post Distant Sign	
	· ·	11.00
19.50	492 SR Home & Distant Doub	ole
14.50	Arm Signal	14.00
17.50	Trackside Buildings	
1	500 GWR Signal Box	19.00
VI .	501 Grounded Coach Body	7.50
	502 Cattle Dock	24.00
ea 2.50	503 Platform Signal Box	19.00
ea 2.50	504 Station Building	39.95
ea 2.50	505 Coaling Stage	9.95
ea 2.50	506 Water Tower	19.00
ea 2.50	507 Grounded Van Body	5.95
	508 Pump/Boiler House	20.00
	509 Occupation Building	5.95
ange	511 Lineside Huts	11.00
9	512 Skylights	2.95
	513 Provender (Goods Store)	19.00

HORNBY O	С	i
Steam Locomotives		ì
R150 L&Y 0-4-0T	39.95	
R255 Loch Ness 0-4-0T	49.95	
R782 Smokey Joe 0-4-0T R053 BR 0-6-0T Jinty	49.95 69.95	
R301 LMS 0-6-01 Jilly	35.95	
R301 LMS 0-6-0T Jinty R858 LMS Black 5	119.95	
R860 BR Hunt Pytchley	129.95	i
R292 GWR King Richard 1	139.95	
R165 GWR 0-6-0T Green (A	IEW)	
B055 00 B (B	75.95	
R855 SR Battle of Britain Fighter Pilot	132.95	
R042 LNER A1 Royal Lance	132.93	
(NEW)	142.95	
R380 BR Saint Clevedon Co		i
	139.95	i
R057 SR Schools Charterho		ĺ
0000 NED FL : 0	139.95	
R398 LNER Flying Scotsman		1
R099 LNER Silver Fox	159.95 149.95	1
R327 LNER A4 Mallard	149.95	1
R373 BR 9F Evening Star	149.95	1
R315 LMS 2-8-0 8F	149.95	į
R322 BR 2-8-0 8F	149.95	1
R037 BR Princess Lady Patr		1
R861 LNER J52 Black	149.95	į
R862 RR M7 0-4-4T	89.95 99.95	1
R862 BR M7 0-4-4T R175 BR 4-4-0 Compound	33.33	8
Coaches		[
R468 LMS 4-wheel	13.95	Ė
R446 GWR 4-wheel	13.95	E
R439 Network SE Mk2 Com R444 Network SE Brake	p 26.95	E
P205 Mk2 1st I/C (Curallous)	26.95	ı
R395 Mk3 1st I/C (Swallow) R420 Mk3 2nd I/C (Swallow	20.93	
R430 Mk3 Buff, I/C (Swallov	126.95	1
R430 Mk3 Buff. I/C (Swallov R434 Mk3 2nd InterCity	26.95	E
R427 Mk3 Buffet InterCity (b	lue)	Ë
D404 441 0 4 14 1 1 1 1 1 1 1 1 1 1	26.95	i
R431 Mk3 1st InterCity (blue R432 Mk3 2nd InterCity (blue	20.95	(
N432 WKS ZIIG IIIEFOILY (DIG	26.95	E
R456 GWR Composite	26.95	(
R457 GWR Brake 3rd	26.95	E
R474 LMS Composite	26.95	(
R475 LMS Brake 3rd	26.95	ì
R477 LNER Composite	26.95	i
R478 LNER Brake 3rd R413 LNER Sleeping Coach	26.95 26.95	E
R442 BR Cr/crm Comn	26.95	E
R442 BR Cr/crm Comp R424 BR Cr/crm Brake 3rd	26.95	E
R223 Pullman Comp	33.95	8
R233 Pullman Brake 3rd	33.95	8
R384 LMS Clerestory Comp R385 LMS Clerestory Brake	26.95	N
R895 Mk111 1et ScotPail	26.95 26.95	N
R895 Mk111 1st ScotRail R896 Mk111 2nd ScotRail R416 Royal Mail (red)	26.95	E
R416 Royal Mail (red)	26.95	E
R409 BR/LNER C/crimson C	omp	E F
	26.95	8
R410 BR/LNER C/crimson B		-
R519 BR/LNER Sleeping Coa	26.95	8
THE TO BITTE IN LINE OF COMMING COM	26.95	V

R384 LMS Clerestory Comp R385 LMS Clerestory Brake R895 Mk111 1st ScotRail R896 Mk111 2nd ScotRail R416 Royal Mail (red) R409 BR/LNER C/crimson Co	26.95 26.95 26.95 26.95 26.95 mp	
R410 BR/LNER C/crimson Br		
R519 BR/LNER Sleeping Coa		1
R098 Permanent Way Coach Wagons	26.95	(
R013 Tarmac Hopper (Proco	r) 16.95	i
R015 Yeoman Hopper (Proce	or) 16.95	ì
R018 Tilbury Hopper (Procor		1
R052 EEC Hopper (Procor) R039 MGR Hopper (Procor) R249 MGR Hopper (Procor) R023 Bulk Grain R024 Crook/Greenaway R025 Regent Tanker R028 Esso Tanker R029 Brake Van SR R052 Astro Van LMB R071 Duckham Tanker R079 BR Brown Min Wagon R117 Railfreight Vent Van R142 Evans Brown R247 45T Railfreight Van R248 45T Open Railfreight Wan	16.95 16.95 16.95 16.95 9.95 13.50 13.50 15.95 16.95 16.95 16.95 16.95	8 H H 3 3 3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
R048 Brake Van Speedlink R235 45T GLW Open Wagon R211 British Steel Open R215 Harvey Bris Lange	16.95 16.95 11.95 16.95	772222

Diesel & Electric Locos R874 BR 06 Blue Shunter

R875 BR 06 Green Shunter R877 BR Class 25 Blue R878 BR Class 25 Green

R954 BR Class 08 Piccadilly R284 BR Class 37 Green Split

Head-code

53.95

53.95 59.95

59.95

59.95

	4
1	
	_
HORNBY O)
Diesel Locomotives Contin	ued
R219 BR Class 47 NSE R285 BR Class 37 Blue Full	79.95
R285 BR Class 37 Blue Full	H/code 59.95
R286 BR Class 37 Railfreigh	os.95 nt 59.95
R276 BR Class 47 Blue	69.95
R286 BR Class 37 Railfreigh R276 BR Class 47 Blue R288 BR Class 47 InterCity R886 BR Class 47 Scot	69.95
Grev Boddy	79.95
R887 BR Class 47 Scot	70.05
Ouke of Edinburgh R876 BR Class 47 Even Stat R289 BR Class 86 InterCity R368 BR Class 86 NSE R283 BR Class 58 Bassetlav R867 BR Class 142 Pacer R397 BR HST 3 Car Pack R297 BR Class 142 Pacer	79.95 79.95
R289 BR Class 86 InterCity	89.95
R368 BR Class 86 NSE	89.95
R867 RR Class 58 Bassetiav	89.95
R397 BR HST 3 Car Pack	99.95
R297 BR Class 142 Pacer	00.05
Cital Wall	05.55
A2 Country Station Building	5.50
A1 Station Platform A2 Country Station Building A3 Island Platform A4 Island Platform Building A5 Two Road Engine Shed A6 Signal Box A7 Goods Depot Building A10 Railway Terminus Build R21 Swan Inn	5.50
A4 Island Platform Building A5 Two Road Engine Shed	5.50 8.95
A6 Signal Box	5.50
A7 Goods Depot Building	5.50 5.50 9.95
B21 Swan Inn	ea 5.50
822 2 Country Town Shops	ea 5.50
ATO Railway Terminus Builo B21 Swan Inn B22 2 Country Town Shops B23 Two Detached Houses B24 Greystones Farmhouse B25 Country Police Station B27 Supermarket & Shop B29 Country Church	ea 5.50
B24 Greystones Farmhouse B25 Country Police Station	ea 5.50
B27 Supermarket & Shop	ea 5.50
B29 Country Church B30 Four Terraced Houses	ea 5.50 ea 5.50
REPLICA OC)
Locomotives LNER B1 Black	149.95
BR B1 Unnamed	149.95
BR B1 Black LNER B1 Green	149.95
GWR 0-6-0 Collett	149.95 99.95
BR 0-6-0 Collett	99.95
GWR 0-6-0T Pannier BR Black 0-6-0T Pannier	89.95
Class 45 Blue (in stock)	89.95 89.95
Class 45 Blue (in stock) Class 45 Green (in stock)	89.95
Coaches LMS 57' Corridor 3rd	31.95
LMS 57' Corridor 3rd LMS 57' Corridor Brake BR 57' Corridor 2nd	31.95
BR 57' Corridor 2nd BR 57' Corridor Brake	31.95
BR 57' Corridor Brake	31.95 29.95
BR/SR Mk 1 Comp Green BR/SR Mk 1 Brake Green BR/SR Mk 1 Rest Green	29.95
BR/SR Mk 1 Rest Green	29.95
NSE Mk 1 Comp	29.95 29.95
NSE Mk 1 Comp NSE Mk 1 Brake Executive Mk 1 Comp Executive Mk 1 Brake Executive Mk 1 Buffet	29.95
Executive Mk 1 Brake	29.95
Executive Mk 1 Buffet BR/WR Restaurant Car	29.95 39.95
BR Crimson/cream Collett al	39.90 I 3rd
	39.95
BR Maroon Collett all 3rd Wagons	39.95
GWR Fruit Van (NEW)	15.95

GWR Fruit Van (NEW) BR Brown Fruit Van (NEW) GWR Vent Van (NEW) BR Brown Vent Van (NEW) 15.95 15.95 14.95 14.95 14.95 Suncole Coke Witewood Coke Abbott Coke 24 Ton Grey Hopper 24 Ton Iron Ore Hopper 16 Ton Mineral Steel Grey 16 Ton Mineral Steel Brown 14.95 14.95 14.95 14.95 Shell Tank Esso Tank Silver HBA Hopper Brown 14.95 14.95 14.95 HBA HOpper Brown
HEA Hopper Railfreight
3 Plank PO, Bath/Corsham
3 Plank PO, Neame & Son
3 Plank PO, Trimsaran
7 Plank PO, C.G. Ayers
7 Plank PO, L.O. Poole
7 Plank PO, Bognor Regis
7 Plank PO, Bognor Regis
7 Plank PO, Bognor Regis
7 Plank Lambert Cox 14.95 12.95 12.95 12.95 12.95 12.95 12.95 12.95 12.95 12.95 12.95 15.95 Plank Lambert Cox 7 Plank Renwick Wilton 7 Plank Hugh Wood 20T Brake Van Railfreight 20T Brake Van Railtreignt 20T Brake Van Departmental 15.95 20T Brake Van BR Bauxite 15.95 20T Brake Van Railfreight A/piped 15.95

VOLLMER We stock a large range of HO & N scale

193.00

189.00

173.00

4179 D8 BR50 Steam

4225 DB BR261 Diesel 4227 DB BR260 Diesel

4174 DR BR50 2-10-0 St

287.00 269.00

4094 DB BR94 Steam

4124 DR BR53 Steam

4095 Euro Eh2 Steam 189. 4115 DR BR89 (ex Pr T3) Steam

AUSTRALIAN HOBBY CENTRES

	N SCALE		*	G SCALE	
DAPOL OO	PECO 'N'	GRAFAR LOCOS	RIVAROSSI 'N'	LEISCHMANN	CATALOGUES
Pug 0-4-0 LMS or BR Deans Goods GWR Jubilee Black Fowler Mogul GWR PECO OO OO Track Finescale Track 25yd pack (NEW) MED RH Point F/S (NEW) MED RH Point F/S (NEW) MED LH Point F/S (NEW) MED LH Point F/S (NEW) MED STAND AND AND AND AND AND AND AND AND AND	Flexible Track	J94 Saddletank NCB Blue GWR or BR 94xx Pannier LMS 0-6-0T GP Tank Black LNER 0-6-0T GP Tank Black LNER 0-6-0T GP Tank Black RN 0-6-0T GP Tank Black SR 0-6-0T GP Tank Green SWR 2-6-0T GP Tank Green GWR 2-6-2T Prairie Black 5-2T Prairie Black GWR Clun Castle Black 5-2T Black Blac	Wagons	### TELESCHMANN Agons Continued 19,20 35,50 28,10 26,20 17,40 18,50 24,30 21,30 8,90 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 23,10 19,90 19	Buildings & Accessories 200 Goods Shed (brick) 10.00 201 Signal Box 8.00 202 Cattle Dock 19.00 203 Engine Shed (NEW) 16.00 204 Station Building Kit 29.00 205 Station Building Canopy 10.00 207 Flat Roof Canopy 10.00 208 Apex Platform Canopy 10.00 209 Platform x 2 10.00 210 Platform Ramp x 2 11 Telegraph Poles x 18 3.00 211 Clineside Hults x 3 4.00 213 Station & Street Lamps 10.01 214 Yard Crane 10.01 215 Water Tower 10.01 216 Lineside Fencing (white) 3.00 217 Concrete Fencing & Gates 10.00 218 Signal Laddering 4 lengths 10.00 219 Concrete Fencing & Gates 10.00 220 Goods Shed (stone) 10.00 221 Platlets, Sacks Barrels 10.00 222 Gords Shed (stone) 10.00 223 GWR Wooden Signal Box 14.00 224 GWR Wooden Signal Box 14.00 225 GWR Wooden Signal Box 14.50 N CARS by Fleischmann 14.50 N CARS Fleischmann 15.795 COmmodores 17.70 Mercedes 21.70 Merce
119.95 Also Wagon Freight from 8.95 Enquire all names!		4-8-8-4 Big Boy 299.95 2-8-8-2 Mallet 249.95 4-6-2 Pacific 179.95 Coaches	8210 18.25 Com 8225 24.10 Com 8233 21.95 Coa 8234 21.95 Coa 8281 18.20 Obs	nbine B&O 69.95 ch UP 89.95	PECO 'G' Flexi Track 900 ea \$19.95 Points L/H 89.95
Qty.	ORM: Freight \$3 minimu	Description		P	rice Total
Card Number				Exp.	Date /
Please Send To			Card Holders Signat	Number	
		***************************************		P/Code	



A SMALL SELECTION FOR THE DISCERNING MODELLER

Lobello

HO & O AMERICAN

1	HOn3 KITS			Grandt Line		Labelle	
Ì	Labelle		\$ c	D&RGW Idler Flat	19.50	1905 Closed Vestibule Coach	30.25
	D&RGW Coach		30.25	D&RGW Wheel & Tie Car	27.95	1901 RPO & Express	38.95
1	D&RGW Combine		30.25	D&RGW Drop Bottom Gondola	35.50	1900 Day Coach	30.25
ı	D&RGW Baggage		30.25	C&S Steel Frame Gondola	27.95		
I	D&RGW Postal		30.25			'HO' STANDARD GAUGE KITS	1
ı	D&RGW Caboose		20.60			-	
I	D&RGW 'Alamosa'		30.25			Tichy Train Group	
	Dang II / IIIIII		50.25			PFE Wood Reefer	32.00
	Dall Line			ON3 KITS		USRA Wood Boxcar	22.95
	Rail Line		27.50	Grandt		USRA 10,000 Gallon Tank Car	24.50
ı	D&RGW Stock Car		26.50	D&RGW 700 Series Gondola	76,50	ICC Large Dome Tanker	24.50
ı	D&RGW Idler Flat		18.60	D&RGW 800 Series Gondola	76.50	Kadee	
	Durango Press			UTLX Tank Car	99.00	Truss Log Car	65.95
	D&RGW Gondola		21.95	C&S 4 Wheel Caboose	67.00	Skeleton Flat	51.95
	D&RGW Idler Flat		21.95	Cas 1 111101 Casco.		Disconnect Log Trucks	32.50
				'HO' AUSTRALIAN	4		
	Powerline - March	ı/April Special		Classic Brass Models		Bergs Brass	
ı	ANR 'BL' Single Mot	tor 110.00	99.00	Z24	695.00	46 Electric	450.00
	Dual Motor	130.00	115.00	Z25	695.00	Tuscan Painted	495.00
	V/Line 'G' Single Mo	otor 110.00	99.00	4 versions available		D59 Oil	795.00
ı	Dual Motor	130.00	115.00			Z26	395.00
1				Bergs Whitemetal Diesel Body Kits		620/720	730.00
1	AR Kit Co.			40, 41, 45, 49, 73	each 60.00	CPH (painted Tuscan)	610.00
	SRA '45' Class Tusca	n or Red Terror each	h 147.15			CTH (painted Tuscan)	490.00
Į	ANR 600 Class Musta	ard Pot	147.15			CTH (unpainted)	435.00
	4						,

EUROPEAN

Bemo HOm - 12mm gauge - Locos & set

Cat # 1258 GE 4/411 258.95 Cat # 1201 V/52 Cat # 1260/2 GE 4/4111 203.50 Cat # 1274 'Traktor Cat # 1255 'Krokodil' 295.75 Cat # 7215-100 '89 Anniversary train set pack A good range of Coaches & Wagons to suit above also available.

BERGS HOBBIES

97 Macquarie Street, Parramatta, N.S.W. 2150 Phone (02) 635 8618 PO Box 527, Parramatta, 2134.

Open for your shopping pleasure: Monday to Friday - 9.00am-5.30pm Thursday - 9.00am-9.00pm and Saturday - 9.00am-4.00pm.

QUALITY MODEL RAILROAD PRODUCTS



THE "ROLLS ROYCE " OF MODEL TRAINS





BRITISH OUTLINE KITS



AMERICAN OUTLINE LOCO'S & ROLLING STOCK

MERTEN

FIGURES GAUGES 0, HO/DO, TT, N & Z.



QUALITY PLASTIC KITS

FOAM UNDERLAY



ROMFORD CAV'NDISH

JACKSON

DRIVERS.

WHEELS AND DET AILING.



AUSTRALIAN MADE KITS

DRILLS, TAPS

NUTS & BOLTS

AVAILABLE FROM

"N" MODEL TRAINS



DEALERS AUSTRALIAN WIDE FOR THE LOCATION OF YOUR **NEAREST AMC DEALER TELEPHONE (02) 476 2488**

Get on the Right Track with

NOW AVAILABLE AT YOUR LOCAL HOBBY SHOP

NSW SRA 81 class loco (painted & powered)	rrp \$144.45
NSW SRA 81 class loco (unpainted & powered)	rrp \$135.00
NSW SRA 81 class chassis (powered)	rrp \$ 96.30
NSW SRA 81 class painted bodies*	rrp \$ 38.52
NSW SRA 81 class unpainted bodies*	rrp \$ 32.76
(* Does not include sideframes & fuel tank)	

ONE PIECE DELRIN BOGIES

NSW SRA 2CL (XCL) bogies	rrp \$6.75
NSW SRA 2CF (XFA) bogies	rrp \$6.75
NSW SRA 2CG (XCG) bogies	rrp \$6.75
NSW SRA 2CH (XCH) bogies	rrp \$6.75
NSW SRA 2BP (Bettendorf) bogies	rrp \$6.75
NSW SRA 2BR (Andrews) bogies	rrp \$6.75
NSW SRA 2AE bogies	rrp \$6.75
NSW SRA 2CM (YMC) bogies	rrp \$6.75
NSW SRA Gloucester bogies	rrp \$6.75
NSW SRA 2AT (ATA) bogies	rrp \$6.75

INJECTION MOULDED STYRENE KITS

rrp \$16.20
rrp \$16.20
rrp \$22.05
rrp \$16.20
rrp \$22.05
rrp \$20.25

The kits listed below are now complete with the correct bogies with wheels and decals.

(Includes BGF 'Unzip-a-Banana' logo)

NSW SRA Brake Detailing Kit

Corrugated Iron 15cm x 17cm

GLX-NLGX Louvre Van GLV-NLGF Louvre Van	rrp \$16.20 rrp \$16.20 rrp \$16.20
TLX-NLTX Tinplate Van	rrp \$16.20
TLV-NLTF Tinplate Van	rrp \$16.20

THE NSW SRA 45 Class Diesel

Now available in the following:-

NSW 45 Class Red Terror Livery 4529, 4537

Indian Red & Chrome **4501**, **4505**, **4509**

Reverse Livery 4508

NSW 35 Class 3507, 3527

SAR/ANR 600 Class Mustard Pot Livery 602

RRP - \$156.60

DECALS

Decal Set for MLE

rrp ea \$0.90

Decar Set for MEE	
(includes UME, FME, etc.) Numeral Decal Set	rrp ea \$0.90
(white nos. for goods wagons)	
OCY Decal Set	rrp ea \$0.90
OCX Decal Set	rrp ea \$0.90
CFX Decal Set	rrp ea \$0.90
81 Class Decal Set	rrp ea \$0.90
BDX Decal Set	rrp ea \$0.90
CCX Decal Set	rrp ea \$0.90
WHX Decal Set	rrp ea \$0.90
CH Decal Set	rrp ea \$0.90

If your local Hobby Shop does not carry stock, order direct - RRP plus postage.

For any correspondence requiring an answer, please enclose SSAE.

For enquiries:

rrp \$ 6.30

rrp \$ 2.52

AR KIT Co.

PO Box 736 GRAFTON, 2460.

Bankcard and Mastercard NOW AVAILABLE

HORIZON HOBBIES

A large range of slides is available catering for the enthusiast, historian or modeller. Our range mainly covers the subjects below and is updated frequently. Other states are also available but on a reduced scale. It is hoped to increase these as time permits.

Government Railways			Code
NSWR Steam Locomotives	(preserved)	over 90	NS
NSWR Diesel Locomotives		over 190	ND
NSWR Passenger Stock		over 140	NP
NSWR Goods Stock		over 130	NG
NSWR Brake & Guards Vans	(in service & preserved)	over 20	NV
NSWR Maint of Way Stock		over 110	NW
NSWR Railmotors	(various classes in service)	over 15	NR
NSWR Facilities	(incl st'ions, signals, tanks etc)	over 50	NF
VR Steam Locomotives	(preserved)	over 70	VS
VR Diesel Locomotives	(most classes in service)	over 40	VD
VR Goods Stock	(both 4 wheel & bogie)	over 30	VG VET
VR Electric Trains QGR Steam Locomotives	(also incl. trams)	over 30 over 80	
QGR Diesel Locomotives	(preserved) (most classes in service)	over 80	QS QD
QGR Passenger Stock	(various classes in service)	over 10	QP
QGR Goods Stock	(both 4 wheel & bogie)	over 60	QG
QGR Maint, of Way Stock	(botti 4 wileel & bogle)	over 10	QW
QGR Facilities	(incl stations, eng sheds etc.)	over 10	QF
Miscellaneous Railways	(,		
SMR & JA Brown Steam Locos	(in service & preserved)	over 90	SS
SMR & JA Brown Goods Stock	(incl coal hoppers)	over 40	SG
SMR & JA Brown Brake Vans	(in service)	4	SV
SMR & JA Brown MofW Stock	(in service)	2	sw
SMR & JA Brown Railmotors	(III SELVICE)	2	SR
SMR & JA Brown Facilities	(incl. stations, signals etc.)	over 20	SF
Private Collieries	(incl. SMR loading fac'ties etc.)	8	SB
Private Steam Locos	(incl. CPC, AIS, SEC, etc.)	over 70	PS
Private Diesel Locos	(incl. BHP,AIS,Sims,SPC,MIM etc.)		PD
Private Goods Stock	(incl. BHP, SPC, MIM etc.)	over 30	PG
Cane Steam Locos	(incl. some preserved)	over 50	CS
Cane Diesel Locos	(in service)	over 30	CD
Cane Goods Stock	•	7	CG
Cane Maint. of Way		7	CM

Our slides are categorised as follows:

D = Detail - useful for modellers H = Historical - slide may not show all detail O = Overall - general slide of good quality for colour schemes etc.

All slides are \$1.35 each. Any five cost \$6.00. Post and packing extra. Large SAE for lists stating interest or codes required. We seek good quality slides to expand our

Write with details to PO Box 10113, BRISBANE ADELAIDE ST., 4000

MODEL RAILWAY **EXHIBITION**

Presented by Illawarra 'N' Gauge Model Railway Club, supported by Ern Webbs Sports Store, Wollongong.

> At Figtree High School Hall, Gibsons Road, Figtree.

(south of Wollongong).

Saturday 12th May and Sunday 13th May 1990, 10am to 5pm.

Admission:

\$2 Adults, \$1 Children/Pensioners, \$5 Family.

HO, N AND Z SCALE LAYOUTS

THE FREEDOM CARS ARE ROLLING!

LGB I-GAUGE MAERKLIN HO-GAUGE (AC) FLEISCHMANN HO-GAUGE (DC) N-GAUGE

MAERKLIN MINI-CLUB Z-GAUGE* OWN A PIECE OF HISTORY BY GETTING THESE CARS!

FREEDOM-CAR

PRESTON HOBBY MODELS PROUDLY PRESENTS THE FREEDOM-CARS: CREATED BY US FOR THE OCCASION OF THE OPENING OF THE IRON-CURTAIN AND THE FALL OF THE BERLIN WALL ON 9 NOVEMBER 1989.

These are low-sided gondolas. manufactured by the above com-

panies, as they run here in Germany, loaded with an AUTHENTIC PIECE OF THE

IRON-CURTAIN FENCE and come with an inlay showing the German Flag and facts about the fence that divided East

and West Germany for so many years.

Also supplied is a CERTIFICATE OF AUTHENTICITY of where your piece of the fence comes from. The certificates are numbered and on the back is a collage of photos of the border, the DDR Border Guards and us when we got the fence for

As the crow flies, we are located in Bamberg only 20 miles from the Iron Curtain; we were present when history was made and a part of history is offered to you through this ad. We spent many hours trying to get pieces of that fence which is still intact and through all sorts of channels were successful. We almost had one foot in jail trying to remove the fence. Note, this is not the WALL but the IRON CURTAIN that divided all of Germany. It is made of hardened zink-plated steel grating and many East Germans got shot or hurt trying to scale it in the past in their quest for freedom. It was patrolled for many vears by the US Army stationed right here in Ramberg.

years by the US Army stationed right here in Bamberg.	
PRICES ARE: US Do	llars
LGB FREEDOM-CAR (pictured)	69.50
MAEKLIN HO-GAUGE FREEDOM-CAR (AC)	24.50
FLEISCHMANN HO-GAUGE FREEDOM-CAR (DC)	24.50
ARNOLD N-GAUGE FREEDOM-CAR	18.50
FLEISCHMANN N-GAUGE FREEDOM-CAR	18.50
MINITRIX N-GAUGE FREEDOM-CAR	18.50
MAERKLIN MINI-CLUB FREEDOM-CAR*	14.50
* (This we could only load with a sliver)	

PRICES INCLUDE AIR SHIPPING!

We donate one dollar of each sale made to needy DDR families. There are many and we invite any donations

You can order by phone, Fax (from 10pm to 7am German time) or by mail. You can pay by cash, check, money order,



PRESTON HOBBY MODELS P.O. BOX 2280

8600 BAMBERG, WEST GERMANY TELEPHONE: COUNTRY CODE FOR GERMANY AND 951 1 2222 (This number is on FAX from 10pm to 7am German time)





The following Whitemetal Castings which have not been available for some time can now be purchased direct from the Manufacturer by Mail Order:

NSWGR Water Column	\$6.75
Torpedo Roof Vents(50)	\$3.50
Brake Wheels (20)	\$2.35
Coach Buffers(24)	\$3.65
Wagon Buffers(24)	\$2.75
Class 42 and 43 Buffers	\$1.25
Class 42 Pilot	\$1.25
Class 42 and 43 Brake Cylinders	(12)
•	\$3.50

(Annealed brass wire cast in to represent cable and push rod)

Class 442 Brake Cylinders(12) (Annealed brass wire cast in to represent cable)

Diesel Straight Buffer Diaphragms (pair) \$0.95

Post and Packing \$2.00 within Australia for each Parcel weighing up to 500 grams (one Water Column weighs about 30 grams)

Good stocks are always held to ensure prompt and efficient service.

Please write to:

KRYSTALL CASTINGS PO Box 334 LANE COVE NSW 2066



PO BOX 86 MERMAID BEACH. 4218. PHONE (075) 38 6992

WE HAVE MOVED.

WE ARE NOW LOCATED AT SHOP 201. LEVEL TWO. OASIS SHOPPING RESORT. BROADBEACH. GOLD COAST.

JUST LOOK FOR THE MONORAIL-OPPOSITE JUPITERS CASINO-

WE WISH TO THANK ALL THOSE WHO HAVE SUPPORTED US IN THE PAST YEAR OF BUSINESS. ALL OF THOSE VISITORS WHO HAVE ENJOYED OUR EXHIBITION IN RECENT MONTHS WILL BE AWARE OF THE WORK WHICH HAS BEEN DONE ON THE DISPLAYS. THESE DISPLAYS HAVE NOW BEEN DISMANTLED AND WORK BEGUN ON A COMPLETELY NEW EXHIBITION AT OUR NEW LOCATION. WE LOOK FORWARD TO SEEING YOU AT OUR NEW STORE.

WHAT DO WE SELL?

LOOK AT THE OTHER ADS IN A.M.R.M.
IF ITS ADVERTISED WE HAVE GOT IT OR
CAN GET IT FOR YOU.

HOW MUCH IS IT?

WE WILL MATCH ANY REASONABLE ADVERTISED PRICE.

WE ARE OPEN 7 DAYS A WEEK

10am - 7pm Monday - Saturday. 12Noon - 7pm Sundays.

MAIL ORDERS.

WE HAVE BEEN IN THE MAIL ORDER BUSINESS FOR TWENTY YEARS.
WE ACCEPT Bankcard:Mastercard:Visa:Amex:Diners:
Cheques and Money Orders.
Under \$100.00 Post at cost, Over \$100.00 Post Free.

BANKCARD - MASTERCARD - VISA...WELCOME POSTAGE FREE WITH ORDERS OVER \$95

NEW KATO GE U30C IN STOCK: Twin Flywheels, New Design Gear Train, Painted Sides on Frame. Available in the Following Road Names:-SF (2 Nos.), BN, Chessie, D&H, PRR, RI, Seaboard, SP (2 Nos.), UP (2 Nos.) ALL ROAD NAMES \$93 ea (Free Postage & Packing).

NEW 50' AIRSLIDE HOPPERS from Delaware Valley Freight Car Corp. *** RTR not kits ***

Available in the Following Road Names:

3 Packs ++ UP, BN, SP, SF Milwaukee, Chessie \$23.50 Pack Singles ++ Undec, UP, BN, SP, SF, Milwaukee \$7.95 Each 3-Packs have different numbers with the singles providing a fourth number.

A NEW SHIPMENT OF LIFELIKE F7A IS EXPECTED SHORTLY. 8 Wheel Drive and Pick-up. UP, B&O PRR \$33.70 Each *****************

KADEE 1160 KATO GE U25B PILOT CONVERSION KITS IN STOCK - GE U30C EXPECTED SHORTLY (Please specify road name.) BOTH CONVERSIONS \$15.50 Each.

Fits BN, PRR. 1161 - 6Fits RI. 1161 1161-2 1161-7 Fits Chessie (C&O). Fits Seaboard.

1161-10 Fits SP. Fits UP. 1161 - 3Fits SF (Blue). 1161-51161-11 Fits D&H

ALL PILOTS NOW COME PRE-PAINTED TO MATCH THE ROAD YOU SPECIFY. ********

NEW RUN OF KATO F3 UNITS EXCEPTED ANY-TIME NOW - CALL FOR DETAILS.

"N SCALE" Magazine issue #2 sold out-ORDER YOUR COPY OF ISSUE #3 NOW \$7.50

CALL OR WRITE FOR A COPY OF OUR FREE NEWSLETTER

PO BOX 43 GLENBROOK NSW 2773

PHONE: (047) 394296

HOURS

Mon. Tues. Wed. Fri. 10am - 5.30pm Thursday 10am — 7pm Saturday 9am — 2pm

OODPECKER



Spares

TRIANG & H/DUBLO **POWERLINE** WRENN

LIMA

MJT Scale Components

CGW Nameplates

Springside Scalelink **Tower Trams DART Castings**

Shire Scenics SMS Decals EKO HO Cars

MODEL RAILWAYS WRENN AGENTS SINCE 1971

8/7 Joyce Street, Pendle Hill, NSW 2145 (Opposite Pendle Hill Railway Station) Phone (02) 636 3855

MAIL ORDERS

PO Box 43, PENDLE HILL 2145. Send SAE for

LATEST MAIL ORDER CATALOGUE Please state Scale and Interest.

WE BUY SELL TRADE REPAIR

LARGE SELECTION NEW & SECONDHAND

lan Lindsav Models

Superquick

1 T G

Main West N-Trains



MERTEN



KALMBACH



Videos Books **Tools**

Precision Paints

DAPOL

HORNBY RAILWAYS





E.F.E. Diecast 'OO' London RT Buses, Trucks and Tower 'Feltham' Trams.

Casula Hobbies

Injection Moulded Plastic	VICILITY
Goods Wagons - 4 Wheel	
LCH Coal Hopper	\$ 9.95
CCH Coal Hopper with extended sides	
RSH Rutile Hopper	10.50
RU Wheat Hopper	11.95
S Open Wagon	11.95
K Open Wagon - Dreadnought ends	11.95
K Open Wagon - Diamond ends	11.95
CW Cattle Van	11.95
GSV Sheep Van	11.95
(All 4 wheel wagons include whee	els)
Bogie Goods Wagons	
TRC Bogie Refrigerated Van	\$ 13.95
HGM/HGX Bogie Open Wagon	13.95
OCY Container Flat wagon	16.95
Bogie Water Gin	20.50
E Wagon Bogie Flat	13.95
BD Bogie Open Wagon	13.95
GP Bogie Concentrate Wagon	13.95
WTY (NGTY) Grain Hopper	17.95
(All kits include bogies and whee	ls)
Passenger Cars	
FO Open End Passenger Coach	\$ 28.55
1110	00.05

SILVERMAZ MODEL'S NSWR KITS

(All passenger cars include bogies and wheels) \$ 7.50 Water Tank (standard tank without stand)

Silvermaz Decals

RUB Set Cars:-

LHO passenger Guards Van LHY passenger Guards Van

SBS/TBS 1st class A/C car

RS (ABS) Buffet/Diner A/C car

SES 2nd class A/C car

PHS Power/Brake van

Set of codes for Tuscan RUB set each \$ 2.80 Set of codes for Candy RUB set Set for NSW 48 Class - Tuscan each 2.00 each 1.20 Set of codes for guard's vans - Tuscan Set of codes for guard's vans - Candy each 0.80 each 0.80

Return of NSWGR Decals Red & Yellow to suit C32 loco

\$2.95 PRICES SUBJECT TO CHANGE WITHOUT NOTICE

ADDRESS 245 Northumberland Street, LIVERPOOL. 2170. Phone (02) 602 8640. FAX (02) 602 8874 **MAIL ORDERS**

If you order by mail, we assure you, we will treat you as a valued customer. Due to advertising lead times sometimes we are temporarily out of stock of some items. If we can't despatch the items you've ordered promptly, we will back order or refund your money if you prefer. When ordering, write to our mail order department,

address below. Please do not send CASH through the mail. Payment by Postal Note, cheque or Bankcard please include card number, expiry date, authorisation and signature

CASULA HOBBIES P.O. Box 72, LIVERPOOL. 2170.

Phone Orders
We also accept phone orders - with credit card payment. Credit cards accepted include:-

Bankcard Mastercard Visa American Express

POSTAGE & HANDLING RATES

Surface Rates

22.95

26.95

26.95

29.95

N.S.W., A.C.T \$5.00 Vict., Qld., S.A. \$6.00 W.A., N.T., Tas. \$7.00 Post Free for orders over \$200.00 (Except Brass Locomotives)

Please Include phone number with order.

* * NEW * *

Roof Mounting Blocks

for

Silvermaz, Powerline & Lima Passenger Cars \$1.95 each

COMPREHENSIVE RANGE

AR Kits Hornby Mains West Kits RTM Books Rails North Models **ARHS Books Powerline ROB Kits** Peco Track Sentinel

COME IN

AND

AROUND

Ian Lindsav Kits

Rollingstock FHG Guard's Van \$27.00 LHG Guard's Van 27.00 27.00 HCX Brake Van HS Brake Van 27.00 BHG Guards Van (includes bogies) 32.00 SHG Guards Van Bogie sideframes, no wheels 27.00 IHG Guards Van 27.00 CHG Guards Van Includes wheels & bearings 27.00

HO Accessories

\$ 24 00 40 Class conversion kit (ex Mains West) 44 Class Pilots (ex Mains West) 422 Class pilots (ex Mains West) 6.00 3.00 Underfloor detail kit for P'line MHO/KB 7.50 Underfloor detail kits for Powerline MHG 5.40 Door & Roof detail kit for P'line MHO/KB T.B.A. 6.00 500 gal. corrugated station water tank 1000 gal. water tanks (2) with stand 6.75 1000 gal. squat corrugated water tanks (2) - no stand 6.00

Pre Cast Concrete water tanks (2) 6.75 Fettlers lineside water tank (2) 4.50 3000 gal. corrugated water tanks 5.50 5000 gal. corrugated water tank 7.00

HO Building Kits

NSWR CC2 P.c. Concrete Toilet Limited Run \$22.50
160' timber platform facing - NSWR 16.00 96' timber platform extension 7.00 N Scale Body Kits \$ 19.50 MHO Guard's van

SCALEWAYS KIT GBX Open Wagon GB Open Wagon

\$18.50 \$18.50

NOW AVAILABLE Etched Brass Kits

HG Guard's Van - four styles \$ 59.95 each

1. Single Passenger

Extra Baggage
 Double Passenger

4. Yass Tramway

MCV Bogie Box Van \$ 59.95 each

HOURS Monday to Friday 9.00-5.30

> Thursday 9.00-9.00 Saturday 9.00-1.00

CLASSIC BRASS MODELS

BROWSE

New Range of RTR Brass Models **HO Scale Rollingstock** NSWGR JHG Goods Brakevan



A lighweight model to feature fully sprung 2AT or 2SA bogies with pin point axles to RP25 standards.

Numbered Limited Edition Super-detailing premium quality by Yulim, Korea Expected delivery - April 1990

Price: \$175.00 each - Pre-paid orderse Retail price after delivery - \$ 225.00 each

Layby or full payment taken

Casula Hobbies, PO Box 72, Liverpool, 2170

or call in at 245 Northumberland St, Liverpool, 2170 Fax (02) 602 8874 Phone (02) 602 8640

See full range of Classic Brass Models on display. Large range of new and secondhand brass for sale at all times.

Platform One - Model Railways

Presents:

The greatest advance since sliced cork?

Rubber Latex Ballast Adhesive!

This new product has been specially formulated to provide the ideal ballast adhesive for model railways:-

- Being based on a rubber compound, it provides much quieter running than available with normal PVA adhesive.
- If you wish to rearrange your track, then the ballast and cork underlay can be peeled off the track and pointwork with minimal damage.

500ml bottle \$4.95

Available from Platform One and Casula Hobbies Dealer enquiries welcome.

Platform One, 2/27 Princes Highway, Fairy Meadow, NSW 2519 (042) 83 5800

Ask your hobby shop



- * SUITABLE FOR BEGINNERS
- *ACCLAIMED BY EXPERTS

NOW!

3 more buildings for your NSW station

V-12 NSWR STATION OFFICER'S HOUSE - Standard Design No. J-1 This 3 bedroom weatherboard house is a standard design from around 1910. The kit is based on Greg Edwards Data Sheet, B22.

Recommended Retail Price \$11.95

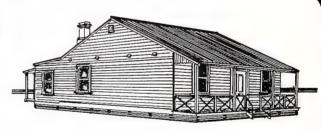
V-14 NSW SKILLION ROOF SIGNAL BOX & GENT'S TOILET C4 WITH WITH LAMP ROOM

The standard wooden skillion roof signal box dates from about 1897 through to 1923. The kit is based on James McInerney's article in AMRM of December 1986.

This C.G.I. Gents Toilet is contemporary with the other NSWR buildings in the L.J. Models range. This model is based on James McInerney's drawing in, "Modelling the Railways of New South Wales: 7."

Recommended Retail Price \$11.95

WE WILL GIVE YOU A GOODS SHED TO COMPLETE YOUR NSW STATION WITH OUR NEXT RELEASES IN THE L.J. MODELS RANGE



Colours match other NSWR kits in the range





THE FULL RANGE OF THE OTHER KITS IN THE L.J. MODELS RANGE IS SHOWN IN THE LAST ISSUE OF AMRM

Trade & General Enquiries:-

ımodels P.O. Box 978. Wodonga, Vic. 3690



RAILWAY VIDEO TAPES

Available in VHS and Beta NEW RELEASES

(Duplicated directly from 1" masters)



'DONNER PASS'

The magnificent saga of **Donner Pass** - the monumental crossing of the mighty Sierra Nevada by rail.

Donner Pass - 138 miles of 2.4% grades that climb to over 7000'. Witness Southern Pacific running 40,000hp trains, modern diesels and rare footage of cab forwards.

60 minutes

Colour

Hi-fi stereo

\$49.95

'NEW YORK CENTRAL COLLECTION'

3 shorts from the 1940s, including 'The Freight Yards', Railroad Signals' and 'The Steam Locomotive'. Plenty of steam action including the mighty NYC Hudsons and other giant motive power.

57 minutes

B&W

Hi-fi sound

\$49.95

'UNION PACIFIC BIG BOYS'

Top action including double-headed 'Big Boys' and the storming of Sherman Hill in full colour and stereo sound.

28 minutes

Colour

Hi-fi stereo

\$39.95

'44 YEARS OF 8444' *

You can experience the definitive story of 844/8444 - the pride of the Union Pacific - 44 years of continuous service, the loco that never retired. Historic and modern footage are combined. A must for UP fans.

60 minutes

Colour

Hi-fi stereo

\$49.95

* Expected release April/May 1990.

NICK LERA'S

'DISAPPEARING WORLD OF STEAM'

Relics of the Raj.

Top films of Indian Railways filmed by Nick Lera over many years.

50 minutes

Colour

Hi-fi sound

\$40.05

'HUDSON THROUGH THE HILLS'

R761 in South Australia

Top production from the makers of 'Main Line Magic'. See R761 make the historic trip to Adelaide and become the last broad gauge steam loco to travel from Adelaide to Peterborough and much more.

87 minutes

Colour

Hi-fi sound

\$49.95

COMING:

'8444 RIDES AGAIN' 'SHERMAN HILL' 'STEAM VIEW VOLS 15 & 16'

Available from:

Victoria: The Railfan Shop, 589 Collins St, Melbourne; The Engine Shed, 5 Carrington Road, Box Hill; Branch Line, 490 Dorset Road, Croydon; Train World, 624 Hawthorn Road, Brighton; The Buffer Stop, 535 Plenty Road, East Preston.

NSW: NSWRTM, 15A Belmore Road, Burwood and Thirlmere Railway Museum; ARHS Sales, 182 Redfern Street, Redfern; Maxwell Collection, Suite 2, Chatswood Village, 47 Neridah Street, Chatswood; Woodpecker Model Railways, Shop 8, 7 Joyce Street, Pendle Hill; ARHS Sales, Box 112, Civic Square, Canberra; Lloyds Model Railways, Box 57, Latham; Toyman Imports, 76 Railway Road, Yennora; Hobbyco, 417 George Street, Sydney; Northside Hobbies, Shops 18 & 19, Thornby's Arcade, 562 Pennant Hills Road, West Pennant Hills; Vic Barnes Hobby Centre, 213 Lambton Road, New Lambton; The Fantastic Model Shops, Strand Arcade Basement, Sydney.

Queensland: J&J Hobbies, 415 Beaudesert Road, Beaudesert.

WA: Derrick Enterprises, 61 Betti Rd, Kalamunda; Perth Hobby Centre, 385 Murray Street, Perth; Westrail Kiosk, West Parade, East Perth.

SA: Port Transport Books & Hobbies, 103 St Vincent Street, Port Adelaide; Model Trading Post, 1193 South Road, St Marys.

Tasmania: Tasmanian Transport Museum, Box 867J GPO, Hobart.

Trade Enquiries - ARE VIDEO, Box 8 PO, Collins St, Melbourne, 3000. Please note: All titles are licensed for SALE ONLY and are not available for rental.

Aster Live Steam 1 Gauge 1/32 Scale

Yes. We stock Aster in depth. Produced in Japan, they are the 'Rolls Royce' of live steam loco kits, as you would expect from the prices shown, and yet, as you assemble one of these beautiful models, you wonder how Aster can produce them for such a low price. They are excellent value and will appreciate. No special skills are required to assemble one, no painting or soldering just patience in assembling the 1000 or so precisely made prefinished parts. Interested? then send for the catalogue, \$14 plus \$2 postage. If still in doubt, send \$20 and I will send you copies of the plans and building and operating instructions of the kit that interests you, the \$20 will be deducted from your kit purchase price.







ľ		
	MARKLIN HO LOCOS	
	3003 DB Class 24 Steam	\$13
	3021 DB 220 Diesel	
	3030 Swedish Electric	
	3035 Italian Electric	
	3038 SNCF Electric	
	3072 DB Diesel	
	3075 DB Diesel	
	3077 Zepplin	\$15
ļ	3082 DB Class 41 Steam	
	3084 DB Class 050 Steam	\$25
	3085 DB Class 003 Steam	
	3089 DRG Class 03 Steam	
İ	3095 Class 74 Tank	
	3104 DB Class 89 Steam	\$5
	3109 KPEV T18 Steam	334
į	3125 Swiss Railcar	D24
ļ	3143 NSB Diesel	
ı	3146 DB Diesel	
ı	3149 SNCB Diesel	
ı	3152 SNCB Electric	\$10
ı	3166 OBB Electric	
ı	3170 Swedish Electric	
ı	3184 Swiss Diesel	
ı	3308 DB Class 85 Steam	
ı	3309 Class 85 with Telex	\$34
ı	3310 DB Class 012 Steam	\$31
ı	3312 Wurttemberg T5 Steam	
ı	3322 DB 194 Electric	
1	3328 Swiss Electric	
Į		

mar Color	
3330 Swiss 'Bahn 2000'	\$240
3332 Swiss Electric	
3356 Swiss Crocodile	
3357 DB Class 103 Electric	
3371 Ice Train	\$700
3511 Wurttemberg C	\$610
3000 Steam (New Unboxed)	\$65
3075 Diesel (New Unboxed)	\$120
3078 Diesel (New Unboxed)	\$75
3087 Steam (New Unboxed)	\$65
3141 Diesel (New Unboxed)	\$125
MARKLIN DIGITAL	NEW

A very large and full range of Marklin Digital gear always in stock.

For example set 2985 contains:
3075 Diesel loco \$164:90
4460 Boxcar\$25:20
4473 Low side car \$21:30
4690 Gondola \$28:40
4710 Boxcar\$26:50
2231 x 12 Curved track \$40:80
2200 x 15 Straight Track \$45:75
2202 x 2 Straight Track \$5:70
2290 Feeder Track \$7:40
2271 Pair Turnouts\$47:75
2274 x 2 Curved Track \$7:50
7224 Rerailing Ramp \$4:30
6629 30VA Transformer \$155:40
5701 Vollmer Building Kit \$31:40
Plus sundry accesories. That's well
over \$600 worth for just \$314 at
Station House. GO FOR IT.
Station House. GO FUH 11.

N

0733 SERVICE MANUAL

New from Marklin. Gives details on service and care of Marklin locos and layouts.........\$14:65

ASTER LIVE STEAM - PRICES

NOTE: All these models are in stock at time of writing however, the A4 Silver Link, the PRR K4 and the Climax in very limited numbers. The prices shown hold good for current stock, we import direct from Aster Japan and prices will fluctuate with the A\$ exchange rate. If/when the Australian dollar falls in value prices will rise.

Chapelons Nord 231 Pacific 4 Cylinder Compound	\$5718	Kit	\$6584	Built
	\$4678	Kit	\$5544	Built
Class 86 2-8-2 DB Tank Red/Black Livery	\$2251	Kit	\$2772	Built
	\$2859			
Br 96 Bavarian Mallet (Green) 4 Cylinder Compound	\$6844	Kit	\$7970	Built
Br 96 As Above but in DB Red/Black livery	\$6671	Kit	\$7797	Built
	\$4851			
Swiss A3/5 4 Cylinder Compound	\$4505	Kit	\$5366	Built

ASTER SPARES: We have direct phone and facsimile contact with the Aster factory and can produce obscure parts that you may need for current and older Aster models within a few days of receiving your order for them.

Suction Fan for raising steam \$62. Fresh water hand pump \$82. 1990 Catalogues (Includes details of new BR96 Mallet) \$14 (plus \$2:00 postage)

NOTE TO KIT PURCHASERS: We will support you with parts and consultation and advice until your engines run on steam.

'TENMILLE' BULL HEAD TRACK GAUGE 1

1 Gauge track and accesories for your Aster live steam garden railway

	Nickel Silver Flexible Track per 10 yards	\$140:00
	Nickel Silver Bull Head rail per 10 lengths of 1 yard	\$30:00
	Sleeper Packs (100 pieces makes 5.5 yards of track)	
	Nickel Silver Quick Assembly Point Kits (No soldering) 3 Metre Rad	lus. Left
	hand or Right hand. Bull head rail matches flex track above	\$78:00
Ì	Nickel Silver points as above, Assembled. Left hand or Right hand	\$89:00
	Point Levers with adjustable throw	
	Bell Crank Sets	\$3:80
	Buffer Stops	
	Nickel Silver Fish Plates for builhead track (10)	\$4:20
	THORE CITY TO THE PARTY OF THE	

If you scour the world you will find eventually, that the best track available to compliment your Aster live steam loco is "Tenmille's" nickel sliver bullhead track. Why? 1. The sleepers resist deterioration from direct sunlight. 2. You can run electric locos on the nickel sliver track without trouble. 3. Large radius point sets to suit the largest Aster loco are available.

IEW 1990 CATALOGUES	SPECIAL ITEM	2750
farklin \$8:00 aller \$7:00 ster \$14:00 ostage per catalogue \$2:00	Still available limited quantity. Primex150 years of German ra silver Class 80 loco plus four passenger wagons	il set. A special

Station House

20 Teddington street Victoria Park West Australia 6100

Ph 361 8566 Fax 362 1362. OPEN Monday to Friday 8:30-5:00 and Last Sunday of each Month 10:00-4:00. A full range (Largest in Australia) of Marklin Z HO and I gauge track, locos, rolling stock and accesories on display. We accept Bankcard Visa Mastercard and Cheques. Mail Order Welcome. Postage and Insurance (If Required) extra.

NOW AVAILABLE

REMOTE CONTROL SYSTEMS "IN-TRAIN" R/C THROTTLE SYSTEM

★ PRICE BREAKTHROUGH ★

R/C FOR LARGE SCALE MODEL TRAINS #1000 DIRECT DRIVE. R/C THROTTLE.

\$149

COMPLETE WITH R/C GEAR

★ FIRST 10 CUSTOMERS ONLY ★

OPTIONAL ACCESSORIES. & FITTING SERVICE AVAILABLE.

DESIGNED & MANUFACTURED IN AUSTRALIA BY CATNIP ENTERPRISES WRITE OR RING FOR INFORMATION DEALER ENQUIRIES INVITED



Five Star Models

37 Woodmason Road, Boronia. Victoria 3155 Australia Phone: ISD 61-3-762 3189 FAX 61-3-762 8807

LARGE SCALE SPECIALISTS

WE SELL AT DISCOUNT PRICES

- ★ DELTON LOCOMOTIVE WORKS
- ★ U.S.A. TRAINS
- ★ KALAMAZOO TOY TRAINS
- ★ LIONEL LARGE SCALE TRAINS
- **★** LGB **★** POLA **★** MODEL POWER
- ★ KITS ★ PARTS ★ DETAILS

TRY US FOR ALL L.G.B. LIMITED EDITIONS

WE ALWAYS HAVE SPECIALS

S.S.A.E. FOR LIST

37 WOODMASON RD BORONIA, VIC. 3155 Phone: (03) 762 3189 Fax: (03) 762 8807

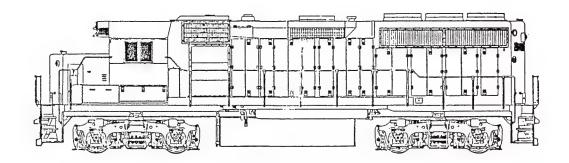


S.S.A.E. FOR LIST WE ACCEPT BANKCARD VISA MASTERCARD MAIL ORDERS WELCOME

PUNCHBOWL HOBBY CENTRE

545 CHAPEL ROAD BANKSTOWN NSW 2200 Phone 709 5082

NEW FROM ATHEARN - THE GP-40-2



AVAILABLE ABOUT MID MARCH IN THE FOLLOWING ROADNAMES

 $\begin{array}{ccc} \textbf{Undecorated with Dynamic Brake} & \textbf{Undecorated without Dynamic Brake} \\ \textbf{BURLINGTON NORTHERN} & \textbf{CONRAIL} & \textbf{C.S.X.} \\ \textbf{RIO GRANDE} & \textbf{SEABOARD SYSTEM} & \textbf{SOUTHERN PACIFIC} \\ & & & & & & & & & & & \\ \textbf{ALL AVAILABLE POWERED AND DUMMY} \end{array}$

COME IN AND CHECK OUR RANGE ON

ATLAS • ATHEARN • BACHMANN • AR KIT CO • PECO • SHINOHARA • MICROSCALE • RIVAROSSI • CAMPBELL KITS CALIFORNIA MODEL CO ROUNDHOUSE ROCO FALLER POLA • KIBRI • VOLLMER MERTEN FIGURES HERPA • SPECTRUM REA WIKING • HELGAN LIFE LIKE • AMRI • IAN LINDSAY MODELS • TRACK EZY KATO • EVERGREEN • PLASTRUCT • BOOKS • SCALECOAT PAINT • FLOQUIL PAINT • JORDAN • MINITRIX • ARNOLD KADEE

ESTABLISHED 1976

OFF-STREET PARKING
MAIL ORDER FRIENDLY SERVICE

HOURS:

Monday 12noon-5.15pm; Tuesday, Wednesday, Friday 9am-5.15pm; Thursday 9am-7.30pm; Saturday 9am-4pm; Sunday 10am-Noon.



594 QUEENSBERRY ST, NORTH MELBOURNE. 3051 Tel. (03) 329 2560

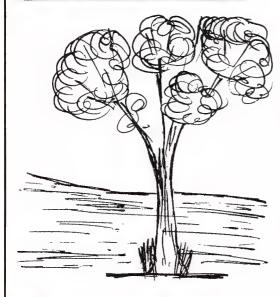
Trading Hrs: Mon-Thurs 9am-5.30pm, Fri 9am-9pm, Sat 9am-1pm



If you missed out on the first run don't miss out on the second.

V/LINE N Class diesel in HO Scale. PRICE

Kit \$399.00 \$120.00 dep. Rtr \$550.00 \$150.00 dep.



Building an Australian layout? Then you will need gum trees. Exclusive to Box Car Hobbies come the most realistic model gum trees yet. Don't miss out. Call into either outlet. (limited supplies)

To complement your 'N' Class 'N' Car Coach Set 3 Car Set (kit) \$ 379.00 (\$100.00 dep.) Single BN Car \$ 129.00 (\$40.00 dep.)

New in Stock:

Northern Models Kits

VR 'Y' Class Diesel Body Kit

VR 'C' Class Diesel Body Kit VR 'B' Van Body Kit

Scaleways Model Kits

GB Open Wagon Kit GBX Open Wagon Kit

Prices subject to change without notice.

These are but a few of the items in stock - Drop into either outlet for the full range.

45 LANGDON ST, PORTARLINGTON 3223 Tel. (052) 59 3521

Trading Hrs. Wed 7pm-9pm, Fri 7pm-9pm, Sat 12pm-6pm.



HORIZON HOBBIES

More great specials from the Master of the Mail Order. Prices valid till 9 May '90. Please note we have a limited number of Walthers 1990 Catalogues as follows: HO - \$18.50, N -\$14.50, no back-orders on these items.

BROAD GAUGE MODELS KITS VR GY 4 Wh Open Wagon VR 14 Wh Open Wagon VR IY 4 Wh Open Wagon VR IY 4 Wh Open Wagon VR U 4 Wh Louvre Van VR UB Bogie Louvre Van VR T 4 Wh Refrigerator Van VR T 4 Wh Refrigerator Van VR T 4 Wh Refrigerator Van VR T 4 Wh Cattle Wagon VR FQX Bogie Container Wagon VR SFX Bogie Flat Wagon VR E Bogie Open Wagon VR AW or BW Passenger VR ABW Passenger VR ABW Passenger Coach VR Z Guards Van 36" Wheel Sets, 25mm, spoke/disc 36" Wheel Sets, 26mm, spoke/disc Paints All VR Colours CAMPBELLS HO	each	36.75 26.00 1.00 1.00 2.50	AR KITS NSWR 45 Class DE Loco - All colours NSW 81 Class DE Loco - Candy NSWR BCH Bogie Coal Hopper (Old) NSWR BDX Bogie Open Wagon NSWR CCX Bogie Coil Steel Wagon NSWR CH Bogie Coal Hopper (Modern) NSWR FWH Bogie Wheat Hopper (Old) NSWR FWH Bogie Wheat Hopper (Mod) NSWR TLYTLX Tinplate Van each NSWR GLV/GLX Bogie Louvre Van each NSWR MLE Bogie Flat Wagon Any five above wagon kits NSWR CFX Bogie Container Wagon NSWR OCX Bogie Container Wagon NSWR NLBX Banana Van Any five OCX, CFX, NLBX Assorted wagons 36" Brass Pinpoint Wheels ax	13.75 13.75 65.00 17.75 17.75 17.50 85.00
230 Bunkhouse Beginner Kit		8.75 9.65	NSWR Bogies - 2AE, 2AT, 2BP, 2BR, 2CF 2CG, 2CH, 2CL, 2CM and Gloucester pa	ir 6.30
231 Bunkhouse Beginner Kit 255 Brass Light Shades	6/	4.30	POWERLINE	ui 0.50
256 Black Chain 300mm	U/	5.00	NSWR 81 Class + 3 FS/BS Candy	157.00
900 Double Hung Windows	4/	2.95	NSWR 81 Class + 3 Container Wagons	115.00
001 Double Hung Windows	E/		NSWR 81 Class D/E Loco (1 motor)	90.00
903 Double Hung Windows small 905 Double Hung Windows	6/		NSWR 81 Class D/E Loco (2 motors)	110.00
905 Double Hung Windows	4/		NSWR 81 Class D/E Loco (2 motors) ANR BL Class D/E Loco (2 motors)	110.00
908 Windows 6 pane large	3/	2.95	V/Line G Class D/E Loco (2 motors)	110.00
911 Double Window	3/	2.95	NSWR BS (1st Cl) or FS (2nd Cl) Coach	22.75
912 Doors Wood	3/	2.95	NSWR KB Mail/Parcels Van	22.75
913 Doors Small GI & Wd	3/	2.95	NSWR BSR Buffet Coach	22.75
914 Double GI & Wd	2/	2.95	Any four BS/FS/KB/BSR Assorted	85.00
915 Doors Large GI & Wd	2/		LABELLE	00.00
916 Doors Front Ent Wood	3/		102 Gear Oil	6.50
917 Doors Large GI & Wd	2/	2.95	106 Gear Grease with Teflon	6.50
918 Doors Large Wd & Gl	2/	2.95	107 Motor Oil Medium	6.50
922 Porch Railings Wood	4/	2.95	108 Motor Oil Light	6.50
923 Chimneys Brick	2/		KADEE HO	0.00
926 Verandah Posts Wood	5/		Ten packs No.5 Couplers	44.00
927 Cyclone Vents	3/		Ten packs Nos. 6 to 16 Assorted	52.50
929 Windows Large Indust.	2/		1011 paono 1100. O 10 10 Madorida	JE,30
935 Hinges Large	8/	2.95		
See our separate advertisement featur	ing our lai	rge range	of NSW, Old and Vic. Government and Private F	Sailwave

See our separate advertisement featuring our large range of NSW, Qld and Vic. Government and Private Railways slides covering Steam, Diesel, Electric, Passenger and Freight Stock. Send a large SAE for list stating interests. \$1.35 per slide, \$6.00 for any five.

Postage: QLD/NSW/ACT Add \$5.50; VIC/SA Add \$6.50; NT/WA/TAS Add \$7.50 - Excess Refunded

All orders to PO Box 10113, BRISBANE ADELAIDE STREET, QLD 4000

SERIES 567 RAIL VIDEO

BRINGS TO AUSTRALIA AND NEW ZEALAND

NORTH AMERICAN RAILROADING AT IT'S BEST

COURTESY OF STEAM POWERED VIDEO (UK).

LATEST RELEASES NOW AVAILABLE (VHS ONLY).

WRITE FOR FREE CATALOGUE & PRICE LIST:

SERIES 567 RAIL VIDEO P.O. BOX 12154 A'BECKETT STREET, MELBOURNE. 3000.

"QUALITY VIDEOS FOR RAIL FANS"

Teast Teast

THE SIGNAL BOX MODEL RAILWAYS

EXPORT DEPT, FEATHERSTONE HOUSE, 369 HIGH ST, ROCHESTER, KENT ME1 1DQ, ENGLAND

WORLD WIDE EXPORT MAIL ORDER SPECIALISTS - MASTERCARD, VISA WELCOME - ADD 10% POST & PACKING. ALL ORDERS SENT AIR MAIL DIRECT TO YOUR ADDRESS

UIRIES REPLIED.

HORNBY NEW FOR 1990 W R312 LNER A4 SILVER LINK (MAY).		R111 NATIONAL LWB TANKER R114 WIMPEY CLOSED VAN	.£3.10	5083 FRUIT WGN. BR BROWN	£4.75	D69 TERRIER LBSC D70 TERRIER SR GREEN	
W R313 LNER A4 GOIDEN	£48.95	R117 BR R/F VENT VAN R118 EMLYN OPEN WAGON R124 CAR TRANSPORTER	L Z.50	5086 G-WHEEL TANK CO-OP 5088 HOPPER WAGON BRITISH GAS 5089 FRIDGE VAN BR GREY	£4.75	D71 TERRIER BR BLACK D72 TERRIER GWR GREEN D80 CL 56 SECTOR LIVERY D81 CL 56 UNPAINTED D100 BOX HILL TERRIER	£34.50
W R314 BR CLASS BLACK FIVE (MAY W R324 BR 8F (3 ALT NOS) (APRIL)	£49.50	R127 CASTROL TANKER	£3.99	5090 BRAKE VAN BR GREY 5094 VENT VAN GW GREY	£4.50	D81 CL 56 UNPAINTED	£23.15
W R325 LMS 8F (3 ALT NOS) (APRIL). W R329 BR BRITANNIA 'WILLIAM SHAKESPEARE' (APRIL)		R140 DURACELL TANKERR142 EVANS & BEVAN OPEN WGN	£3.99	5097 COAL WGN. WEBSTER 5098 HOPPER BRITISH STEEL	£4.25	E1A LMS DINING CAR	
W R330 BR BLACK 9F (3 ALT NOS)		R206 CHANCE & HUNT OPEN WAGON R211 BRITISH STEEL WAGON R215 HARVEY BROS CATTLE VAN	£2.75 £3.10 £4.50	5099 SWB BRAKE VAN BR BROWN 5099A SWB BRAKE VAN BR GREY 5100 VENT VAN WRENN RLYS	£4.25	Full Dapol range stocked	
3 ALT NOS) (APRIL)		R218 BP CHEM TANKER	£3.85 £4.75	5101 SALT WGN. ICI NEW 5500 LTD EDT 7 PLK BARNSLEY	£4.75	LIMA O GAUGE	
W R333 BR CI 86 INTER-CITY 3 ALT NOS) (APRIL) W R335 BR CI 86 R/FREIGHT HALLEYS	£27.75	R247 BR R/F 45 TON VAN	£4.75	NEW 5501 LTD EDT TANK WGN	£7.50	O-6-0 BR Black 4F Electric	£39.99
OMET (JUNE)	£27.75	R249 BR MGR R296 TRACK CLEANING COACH R714 GWR BRAKE VAN	£4.75	NEW 5502 LTD EDT HOPPER WEAVER	£8.75	O-6 D LMS Maroon 4F Electric. Class 33 8R Blue Electric. BR Crim-Cream Mk 1 comp. BR Crim-Cream Mk 1 brik. LMS Maroon Mk 1 comp. LMS Maroon Mk 1 brik Mineral Wagon Caxton Mineral Wagon Hall & Dean Coal Wagon NCB. GWB Toad brik van	£16.50
IVERY (APRIL) W R268 BR MK4 DVT (JULY)	£37.50 £10.95	R718 LMS BRAKE VAN	£4.50 £15.99	TRANSPORT		LMS Maroon Mk1 comp	£16.50
W R391 LNER CLERESTORY COMP	£7.90			WRENN ACCESSORIES 7300 SPOKED WHEEL IN POINT AXLE X	4£3.00	Mineral Wagon Caxton Mineral Wagon Hall & Dean	£7.25
N R405 BR MK4 OPEN 1st (NOV) N R407 BR MK4 TOURIST OPEN (NOV N R408 BR MK4 CATERING COACH	().£10.95	NEW WRENN FOR 1990	1	7301 DISC WHEEL PINPOINT AXLE × 4 7302 SPOKED WHEEL PLAIN AXLE × 4 7303 DISC WHEEL PLAIN AXLE × 4	£3.00	GWR Toad brk van	£8.50
VOV) KE OF R268, R405, R407, R408	f42.00	2294 Duchess of Abercorn LMS grey	£79.00 £82.00	7304 COUPLING SET × 4	£1.25		
V R449 LNER CLERESTORY BRAKE V R017 45T VAN VDA S SECTOR	£7.90	2296 Dartmoor W/C BR green	£79.00	7308 5 POLE ARMATURE	£8.12	RATIO '00' PLASTIC KITS' 411 GWR/LMS JOINT LOADING GAUGE	
(5 FOR £28.00) V RO26 PROCOR HOPPER REDLAND (5 FOR £28.50)	£5.99	2298 Royal Scot BR green	£83.00 £92.00 £93.00	7400 STANDARD CARBON BRUSHES × 1 7401 BRUSH-SHORT 0-6-0 × 12 7402 BRUSH-LONG MOTOR BOGIES × 1	£4.00	419 CONCRETE FENCE POSTS, WIRE, GATES, SIGNS ETC	£1.90
V RO33 MGR COAL S-SECTOR HAA (5 FOR £26.00)		2414 Eta Ea Orty of Hottargham an Dack	133.00	7403 BRUSH SPRING STANDARD × 12 7404 RINGFIELD SPRINGS 6L + 6R	£1.40	420 GWR STATION FENCING WITH GATES, FENCING RAMPS	£1.30
V RO34 VENT VAN VEA S-SECTOR (5 FOR £17.50) V RO49 BR 20T BRK VAN S-SECTOR.		WRENN	_	REPLICA RAILWAYS		421 GWR STATION FENCING WHITE 422 GWR STATION FENCING BLACK 423 GWR LINESIDE FENCING (36 POSTS	99p
V RO67 45T OPEN WGN S-SECTOR (5 FOR £27.00)	£5.95	2204 0-6-0 LMS RED	£26.00 £26.00	NEW B1 NO NAME OR NUMBER	£39.95	WITH WIRE)	90p
R081 GREY IRON ORE WGN	£2.95	2206 0-6-0 TANK BR GREEN	£26.00 £26.00	11003 PANNIER GWR	£25.95 £39.95	425 LINESIDE FENCING BLACK	90p
HORNBY STEAM LOCOS		2209 4-6-2 A4 GOLDEN EAGLE LNER GRN.: 2211A SILVER LINK A4 BR GREEN	£68.00	11011U B1 BR BLACK 'UNNUMBERED' 11012 B1 LNER GREEN 'SPRINGBOK'	£39.95	427 LMS STATION FENCING BLACK 429 CONCRETE FENCING	£1.40
V RO37 BR PRINCESS 'LADY	£46.50		£68.00 £35.00 £58.00	NEW 11013 B1 LNER BLACK NO. 1059 NEW 11014 B1 BR BLACK NO. 61132 11021 03 GREEN	£42.50	452 TELEGRAPH POLES (16 POLES) 500 GWR SIGNAL BOX	£5.90
TRICIA" 2 LNER A1 "ROYAL LANCER" 3 BR 0-6-0 JINTY	£41.50	2224 2:8:0 8F BR BLACK	£65.00 £75.00	11022 03 BLUE	£25.95	501 GROUNDED COACH BODY	£2.10
7 SR SCHOOLS HARTERHOUSE	£40.50	2227 STEAMLINE B OF B SPITFIRE 5 POLE I 2230B CL. 20 BR BLUE	£39.00	11161 MODIFIED HALL CARE MID OO	£29.50	503 PLATFORM/GROUND LEVEL SIGNAL BOX	£5.90
9 LNER 'SILVER FOX' D L&Y 0-4-0 TANK 5 GWR 0-6-0 PT GRN	£44.50 £13.99		£39.00 £66.00	11152 MODIFIED HALL BR GREEN MID 9 11501 CLASS 45 BR BLUE 11501U CLASS 45 BLUE (+ NAMEPLATE	£26.50	EGE COALING STAGE	£11.35
5 'LOCH NESS' 0-4-0 TANK 2 GWR KING CLASS 'RICHARD I'	£13.99	2246 2-6-4 TANK CR BLUE	£69.99 £66.00	13204 7 PLANK AYRES	£26.50	506 WATER TOWER. 507 GROUNDED VAN BODY. 508 PUMP HOUSE:BOILER HOUSE. 509 OCCUPATION CROSSING. 510 INDUSTRIAL FITTINGS.	£1.65
1 LMS 0-6-0 TANK JINTY 5 LMS 2-8-0 CLASS 8F	£24.25	2260A R. SCOT CALEDONIAN MAROONI 2261 4-6-0 R. SCOT BLK WATCH LMS BLKI	£75.00 £68.00	13205 7 PLANK POULE	£2.85	509 OCCUPATION CROSSING	£1.60
2 BR 2-8-0 CLASS 8F	£46.25	2265 4-6-2 B/B W. CHURCHILL BR GREEN I 2265A GOLDEN ARROW FIGHTER PILOTI 2266 W/C PLYMOUTH SR GREEN	£68.00 £68.00 £69.00	13301 3 PLANK BATH COSHAM	£2.85	511 LINESIDE HUTS (2) 512 SKYLIGHTS 513 PROVENDER (GOODS) STORE	
BR CLASS 9F 'EVENING STAR' BR SAINT 'CLEVEDON COURT'	£44.75		£89.00	13303 3 PLANK TRIMSARAN 13501 BRAKE VAN RAILFREIGHT 13502 BRAKE VAN DEPT	£3.35	514 PACK OF ASSORTED PALLETS. SACKS & BARRELS	
8 LNER 'FLYING SCOTSMAN'	£1.50	GREEN	£69.00	13503 BRAKE VAN AIR PIPE	£3.35	515 PLATFORM CANOPY	£4.95
8 LMS BLACK FIVE 9 LNER HUNT 'FITZWILLIAM'	£34.75	2269 4-6-2 REBUILT SIR K. PARK BR GRN	£69.00	13551 20 TON TOAD BRK GWR GREY 14101 HOPPER HBA BROWN	£3.65	516 STATION VALENCING	£4.20
0 BR HUNT 'PYTCHLEY' 6 SR BATTLE OF BRITAIN G/A	L3/.50	2270 2-6-4 4MT BR GREEN	£72.00 £58.00 £69.00	14102 HOPPER HBA RAILFREIGHT 14103 HOPPER NEW NO	£5.95		
HORNBY DIESEL/ELECTRIC	Clark o	2274/5P 4-6-0 R. SCOT LANCASHIRE WITC LMS MAROON	H £75.00	NEW 14103D HOPPER HEA R/F	65.95	PECO OO NEW SL100F BOX 25YDS FINE SCALE	£32.50
4 BR 08 INTERCITY 9 BR CL. 47 NSE	£20.75	2275/5P 4-6-2 S-LINE HURRICANE BR GRN I 2276 4-6-2 S-LINE EXETER SR GREEN	£68.00	12041 COLLETT ALL 3RD GWR	£10.95	SLE195 R/H MED FINESCALE	£4.70
V R240 BR CL. 91 ELECTRIC (Jan 90) 2 BR CL. 90 ELECTRIC 5 BR 47 R/F (SECTOR LIV)	£26.25	2278 4-6-2 S-LINE BLUE FUNNEL SR	£72.00 £66.00	12053 COLLETT CRIMSON/CREAM	£10.95	ST240/241 SETRACK POINTSST242/243 CURV SET POINTS	£3.50
5 BR 47 R/F (SECTOR LIV)	£22.50	2278A BLUE FUNNEL SR GREEN	£68.00 £59.00	12101 BUFFET BR EX. 12102 BUFFET BR EX. 12104 BUFFET WR CHOC. 12111 MK1 SF GREEN. 12112 MK1 BR EXECUTIVE. 12113 MK1 NSE. 12121 MK1 SF GREEN. 12122 BR EXECUTIVE.	£7.35 £6.95	SL90 DOUBLE SLIP. SL91 92, 97 POINTS SL95, 96, 98 POINTS SL88, 89 POINTS LARGE SL88, 87 POINTS CURVED SL93 SLAV POINTS SL93 SLAV POINTS SL94 LONG CROSSING SL94 LONG CROSSING SL94 1, 92, 97 POINTS SL95, 96, 88 POINTS SL88, 89 LARGE POINTS SL88, 87 CURVED POINTS SL89, 87 VIEWS POINTS SL89, 87 VIEWS POINTS SL89, 87 VIEWS POINTS SL89, 87 VIEWS POINTS	£3.75
7 BR DMU CL. 110. 3 BR CL. 58 "BASSETTLAW" 4 BR CL. 37 GRN SP/HD. 5 BR CL. 37 BLUE FULL/HD. 6 BR CL. 37 R/F.	£22.99	2281 2-8-0 8F WAR DEPT GREY	£65.00	12112 MK1 BR EXECUTIVE 12113 MK1 NSE	£7.35	SL88, 89 POINTS LARGE SL86, 87 POINTS CURVED	£4.80
		2284 89 NEATH ABBEY BR GREEN	£66.00 £66.00 £69.00	12121 MK1 SR GREEN 12122 BR EXECUTIVE 12123 BR NSE	£7.35	SL99 3 WAY POINT	£11.00
8 BR CL. 47 I/CITY 9 BR CL. 86 I/CITY 7 BR 142 PACER (G-M-PTE)	£21.99 £25.50	2285 89 8P Q. ELIZABETH LMS MAR	£66.00	12201 57' 38D LMS CRIMSON	£8 50	SLE91, 92, 97 POINTS	£3.85
B BR CL. 86 NSE 7 BR HST PACK	£25.50	2287 89 W.C. WESTWARD HO BR GRN	68.00	12202 57' 2ND BR MAROON	£8.50	SLE88, 89 LARGE POINTS	£4.90 £5.00
5 8K CL. 58 K/F (SECT LIV)	. £28.99	2289 89 S-LINE CANADIAN PACIFIC SR BLACK 2290 89 S-LINE CANADIAN PACIFIC	£73.00	NEW 12251 50' PARCELS LMS CRIMSON NEW 12252 50' PARCELS BR MAROON	£8.50	SL50 ROLL UNDERLAY	£2.95
7 BR CL. 142 RAILBUS (PACER) , 4 BR CL. 06 BLUE	£16.25 £18.99	SR GREEN	£73.00 £73.00	NEW 12252 50' PARCELS BR MAROON NEW 12253 50' PARCELS BR CRIM/CRM 13207 7 PLANK LAMBERT 13208 7 PLANK RENWICK	£2.85	SL51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 66, 67, 68, 69 UNDERLAYS SL100 BOX TRACK SL10, 11 JOINERS SL40 RAILBUILT BUFFERS SL40 RAILBUILT BUFFERS SL14 TRACK PINS SL41 BUFFER SLEEPER RAILS WO IR DAVIGHT TANK KIT WO 2 SHELL BP TANK KIT	£1.65
HORNBY COACHES	-775	2292 89 0-6-2 SR GREEN	£36.00	13208 7 JAINK EAWBERT 13208 7 JAINK HUGHWOOD 13209 7 PLANK HUGHWOOD 13801 SHELL TANKER 13802 ESSO TANKER 13802 ESSO TANKER 13342 9 PLK SUNCOLE COKE 13342 9 PLK SUNCOLE COKE 13343 9 PLK WHITWOOD CHEMICAL 13401 146 TSEEL MINERAL BIR CREV	£2.85 £3.65	SL10, 11 JOINERS	75p
3 PULLMAN COMP	£9.99	BRIGHTON BELLE BR BROWN + CREAM	£76.00 £69.99	13802 ESSO TANKER	£3.65	SL14 TRACK PINS	45p
4 LMS CLERESTORY	£6.50	BRIGHTON BELLE BR BLUE	4S	13353 9 PLK WHITWOOD CHEMICAL 13401 16t STEEL MINERAL BR GREY	£3.25	WO1 R DAYLIGHT TANK KIT	£5.99
5 BR MK3 1st I/C 9 BR (EX LNER) COMP	£8.25 £8.50		£78.00 £65.00 £76.00	13402 16t STEEL MINERAL BR BROWN 13411 24t HOPPER BR GREY 13412 24t HOPPER BR BROWN	£3.45		
3 LNER SLEEPER	£8.50	2408 0-6-0 JUBILEE TK 24K GOLD PLATEDI NEW 2409 8F 2-8-0 BR BLACK	£35.00			GAUGEMASTER	£26.05
9 BR (EX LNER) SLEEPER	£8.25	NEW 2411 S LINE ROYAL MAIL BR		13601 12t FRUIT VAN GWR	£3.45	P SINGLE TRACK SIM/BRAKE D TWIN TRACK DOUBLE CONTROLLER DS TWIN TRACK SIM/BRAKE 04 FOUR TRACK CONTROLLER	£38.95
D BR MK3 8UFFET I/C 4 BR MK3 2nd I/C (PRE 87 LIV)	£8.25	NEW 2412 W/C SEATON BR GREEN	£85.00 £85.00	13611 12t VENT VAN GWR	£3.45 £42.25	100 M SINGLE POWER CONTROLLER	£27 QE
BR MK2 NSE COMP	£8.25			11013 LNER BLACK 11031 STD CL 4 BR BLACK MAR 90 11032 STD CL 4 BR GREEN MAR 90	£34.50 £34.50	U SINGLE TRACK SIM/BRAKE. UD TWIN TRACK DOUBLE CONTROLLER. UDS TWIN TRACK SIM/BRAKE	£23.99
3 BR BRAKE CRIM/CRM	£8.25	WRENN WAGONS	64.50	LIMA		UF SINGLE FEED BACK	£14.50
5 SR BRAKE 3rd 5 GWR 4 WHEEL	£8.25 £3.99	4311 LMS GUARDS VAN	£4.50	FULL RANGE STOCKED AT 15% DISCOUNT		HH HAND HELD SINGLE EEED BACK	
4 BR MK3 HOVERSPEED 5 GWR COMP	£8.25	4318x VENT VAN BROWN 4640 STEEL OPEN BROWN	£4.50 £4.25	D1 LMS PUG 0-4-0		CONT. T1 TRANSFORMER. NEW TS 3 TRACK 2 + 1 SIM/BRAKE	£59.99
GWR RESTAURANT	£8.25 £8.25	4310 BR GUARDS VAN 4311 LMS GUARDS VAN 4311 LMS GUARDS VAN 43118 BRAKE VAN BR 43188 VENT VAN BROWN 4848 HOPPER BR GREY 4652 LOWMAC 4654 MINERAL WOR. BR BROWN 4658A MINERAL WOR. BR BROWN 4658A MINERAL WOR. BR BROWN 4655S AXA SALT WGN 5000 5 PLK BUT WGN	£4.95	D1 LMS PUG 0-4-0	£21.95	DF TWIN TRACK SF SINGLE TRACK HIGH FREQUENCY TRACK CLEANER	£27.99
4 LMS COMP	£8.25 £8.25	4655A MINERAL BR GREY 4655A MINERAL WGN, BR BROWN 4658X BR SILO PRESTWIN	£4.25 £5.75	D2 BR PUG 0.4-0. D4 GWR COUNTY OF STAFFORD. D5 BR DORCHESTER CASTLE. D6 BR NEATH ABBEY	£43.50 £43.50	NEW UTS PANEL MOUNT TWIN + SINGLE-SIMULATOR	£42.50
PULLMAN COMP PULLMAN GAMP PULLMAN GAMP PULLMAN BRAKE LMS CLERESTORY LMS BRAKE BR MK3 1st IC BR MK3 1st IC BR MK3 1st IC BR MK3 1st IC BR MK3 2st IC BR MK3 BR ST IC BR MK3 EST IC BR MK3 HOVERSPEED GWR ESTAURANT LWS COMP GWR BRAKE GWR COMP LWS	£8.25	4665 SAXA SALT WGN	£4.75	D5 BR DORCHESTER CASTLE. D5 BR NEATH ABBEY D7 J94 WARRINGTON GREEN D13 CL 56 REVISED LIVERY D14 CL 56 RAILFREIGHT D15 28 4-4 OLMS GLACK D17 2P 4-4 OLMS GLACK D17 2P 4-4 OLMS GLACK D18 DEAN GDS GT WESTERN D18D BEAN GDS GT WESTERN D18D DEAN GDS SHIFTBUTTON D19 O-4-2 GWR GREEN 14XX D20 0-4-2 BR GREEN 14XX	£28.89 £30.25	RELCO TRACK MAINTAINER	
S SCOTRAIL MK3 1ST	£8.25	5001x BLUE SPOT VAN	£5.25 £4.75	D14 CL 56 RAILFREIGHT	£30.25 £43.50		
HORNBY WAGONS	- W.L	5007 BANANA GEEST	£4.50	D16 2P 4-4-0 BR BLACK	£43.50	TASMA PRODUCTS	
3 PROCOR HOPPER TARMAC	£5.25	4665 SAXA SALT WGN 5000 5 PLK BU % CO 5001 RULE SPOT VAN 5006 DRE WGN SOUTHOWN 5007 BANANA GEEST 5008 PDEN WGN HARRIS 5012 PARCELS VAN BR BLUE 5019 RRIDGE VAN GW WHITE 5019 R REFRICERATOR VAN 5022 YELLOW FYFFES VAN 5029 GW STEEL WGN 5025 HOPPER NCB.	£4.50 £4.50	D186 DEAN GDS GT WESTERN	£43.50 £43.50	NEW TWIN TRACK CONTROLLER AUTO SUITABLE FOR N & OO/HO IDEAL FOR	
6 BR 45 TON VAN (SECTOR LIV) V R018 SILCOCK EXP CARTIC	£5.25	5022 YELLOW FYFFES VAN	£4.25	D19 0-4-2 GWR GREEN 14XX D20 0-4-2 BR GREEN 14XX	£25.87	PORTESCAP, DIRECTIONAL LEDS	£47.50
9 PROCOR HOPPER TILBURY	£4 95	3025 WWY FEEL WON- 3036 HOPPER NCB. 5039 PETROL TAN BR BROWN 3056 HOPPER YAN BR BROWN 3056 HOPPER 21T WAS BLC 5056 GUNFOWGH AVA BLC 5056 GUNFOWGH AVA BLC 5056 BLANK WAGO BRITISH SODA 5056 BLANK WAGO BRITISH SODA	£5.50 £6.50	019 0-4-2 GWR GREEN 14XX D20 0-4-2 BR GREEN 14XX D22 2-6-2 PRAIRIE GWR GREEN D27 ROYAL SCOT BR GREEN D34 4-6-0 ROYAL SCOT LMS RED D35 4-6-0 ROYAL SCOT BR GREEN	£37.95 £25.87	PECO N GAUGE ROLLING STO	:ĸ
0 3×20 CONT WAGON	£5.25	5053 UTILITY VAN BR BROWN 5056 HOPPER TARMAC + LOAD	£7.25	D34 4-6-0 ROYAL SCOT LMS RED D35 4-6-0 ROYAL SCOT BR GREEN	£35.00 £35.00	MK 3 JUBILEE LMS BLACK	£39.99
5 REGENT TANKER 7 RAILFREIGHT FERRY VAN	£5.50	5068 HOPPER 21T CHARRINGTONS	£5.75 £4.50	D40 4-6-0 PATRIOT BR GREEN. D41 ROYAL SCOT ISCOTS GDSMAN GRI D42 4-6-0 JUBILEE BLACK.	1) £41.40 £41.40	5PLK MINERAL LMS, GW, SR, 7PLK C LMS, GW, COAL STEEL NE, GW, BR, BC GW, NE, LMS, BR, TUBE WGN GW, RA	X VANS
9 SR BRAKE VAN	£5.50 £4.75	5070 DISTILLERS SALT GREY	£4.75			FISH VAN BR. COAL 7PLK PAR CHARRINGTONS, LIME CRAWSHAY, S	RK END, LB, BOX
9 SR BRAKE VAN 9 BR MGR (SECTOR LIV)	£5.25 £4.95	5070 DISTILLERS SALT GREY 5072 BLUE CIRCLE CEMENT 5074 OPEN BASSETT + LOAD 5075 TWINNING + LOAD 5079 HOPPER NORTH EASTERN	£4.50 £4.50	D47 2-60 MOGUL GWR GREEN D49 2-60 MOGUL GWR GREEN D49 2-60 MOGUL BR GREEN D52 0-6-2 NZ BR BLACK D53 0-6-2 NZ LNER GREEN D59 0-6-2 668× BR BLACK B60 0-6-2 668× GR GREEN	£34.50 £24.50	VAN WORTHINGTON £2.20 each COP WGNS GWR. LMS. BR. RALEIGH, LYC	NTAINER ONS. LEP
9 BR MINERAL WAGON 9 BR 20 TON BRAKE 5 PRESTWIN SILO 8 PERMANENT WAY COACH	£5.50			D53 O-6-2 N2 LNER GREEN	£24.50 £30.25	£4.10 each. PALLET VANS ARMY, FO £2.75 each WHISKY WGN ABBOT	S. HAIG
	£3.50	5081 CEMENT PRESSFLO BR BROWN 5082 HOPPER SYKES + LOAD	.t4.75	D60 0-6-2 66×x GWR GREEN	£3U.25	W/HORSE £3.50 each SALT SAXA, SHAK each.	M, 12.55

PL 10 POINT MOTOR	
PL12 MOTOR ADAPTOR	65
PL13 ACCESSORY SWITCH	£1.20
PL17 PROBE	
PL18 STUDS AND TAGS	
PL40 WHEEL CLEANING BRUSH	
PL16 POINT MOTOR SWITCHES	£2.00
SEEP POINT MOTORS	
PM1 WITH SWITCH	£2.80
6 for £14.40	
PM2 POINT MOTOR	£2.4
6 for £12.60	
PM4 WITH S/LATCHING	£3.00
6 for £15.50	
CAPACITOR DISCHARGE UNIT HEAVY	
DUTY	£5.50

£7.25	PECO 'N'	-
£8.50	ST5/6/7 SETRACK POINTS	£3.75
£8.50	SL391/392/397 POINTS	
20.00	SL388/389 POINTS LARGE	£4.50
	SL386/387 POINTS CURVED	£4.50
	SL394 LONG CROSSING	£4.20
200	SLE391/392/397 POINTS	
	SLE388/389 LARGE POINTS	£4.60
£1.10	SLE386/387 CURVED POINTS	
	SL310/311 JOINERS	
£1.90	SL330 DECOUPLERS	
	SL340 BUFFERS	55p
£1.30	BOX SL300 TRACK	£28.50
99p	SL350 UNDERLAY ROLL	£2.20
99p	SL348/349/351/352/353/368/369/	
	354/370 UNDERLAYS	£1.25
99p	KNR4/8/9/10/42/43/45 KITS	£1.30
90p	KNR5/7/40/41/44 KITS	
90p	KNR48/49 KITS	
90p	KNR29/39 KITS	
90p	NR200/201/202/203/204/205 WAGON	
£1.40	LOADS	75p
90p	NR121/123 CHASSIS	
90p	NR1218/122 CHASSIS	
£5.90	NB55 TURNTABLE KIT	£6.75
£2.10	NB80 TRAIN SHED UNIT	£4.95
£6.65		
£5.90	MINITRIX 'N'	_
£2.95		
65.90	12037 BRITANNIA	
£1.65	12038 IVATT 2-6-0 GREEN	

morring or	
12037 BRITANNIA	£38.95
12038 IVATT 2-6-0 GREEN	£39.95
12039 IVATT 2-6-0 BLACK	£39.95
12040 IVATT 2MT TANK	£34.95
12039 IVATT 2:6-0 BLACK 12040 IVATT 2MT TANK 12041 2:10-0 EVENING STAR	£42.95
12042 BOADICEA	£38.95
12042 BOADICEA 12052 0-6-0 DOCK TANK	£22.95
12058 9F BLACK 2-10-0	£41.95
12942 WARSHIP BLUE	£32.95
12946 A4 SIR N. GRESLEY BLUE	£42.95
12947 A4 MALLARD GREEN	£42.95
12949 BR A3 F. SCOTSMAN	£44.95
12950 LNER A3 F. SCOTSMAN	£44 95
12958 CLASS 47 Q. MOTHER	£39.95
12966 CLASS 47 C. OF NORFOLK	£39.95
12024 CLASS 47 RAILFREIGHT	£39.95
12025 CLASS 47 INTERCITY	£30.05
13003 BR COMPO MK 1 B/GREY	EE 25
13004 BR COMPO (WR)	CE 2E
13005 BR COMPO MARGON	
13005 BR COMPO MARGON	£5.25
13006 BR BKE COMP B/GREY 13007 BR BKE COMP (WR)	LD.25
13007 BR BKE COMP (WR)	£5.25
13008 BR BKE COMP MAROON 13013 LNER TEAK BKE CORR COMP	£5.25
13013 LNER TEAK BKE CORR COMP	£5.75
13014 LNER TEAK 3RD CLASS	
13065 BR COMP RED/CREAM	£5.25
13066 BR BKE COMP RED/CREAM	£5.25
13252 TIPPING WGN (2 PCS) PK	£4.99
13252 TIPPING WGN (2 PCS) PK	£7.50
13272 TANKER SHELL/BP	£3.40
13273 TANKER ESSO	£3.40
13274 TANKER N. BENZOLE	£3.40
13277 MGR HOPPER WAGON	£3.95
13284 ARNOLD SANDS OPEN	£2.60
13533 CAR TRANS. + 4 CARS	£4.70
13570 BR 20T GOODS BKE VAN	£2.99
13571 BR 16T MINERAL WGN BRN	£2.40
13572 BR 12T VENTILATED VAN	£2.40
13573 OPEN WGN W/BARRELS	£2.40
13574 COVERED AB VAN	£2.40
13575 BOGIE BALLAST WAGON	£3.70
13576 BR 16T MINERAL WGN GREY	£2.40
13579 FOSTER OPEN WAGON	£2.40
13580 7 PLK ROBERTS & JENKS	£2.75
13581 SCARWOOD OPEN WAGON	£2.40
13583 ILKESTON OPEN WAGON	
13584 MILLOM OPEN WAGON	
13630 BRAKE VAN RAILFREIGHT	
13631 12T VENT WGN RAILFREIGHT	C2 45
13632 MGR HOPPER WGN RAILFREIGHT	£2.45
OD CLAINC COOTCHAN A TEAK	£3.05
BR FLYING SCOTSMAN + 4 TEAK COACHES	
LNER FLYING SCOTSMAN + 4 TEAK	165.95
COACHES	ccc 0-
COACHES	105.95
SIR N. GRESLEY A4 LNER + 4 TEAK	000.0-
COACHES BR MALLARD A4 + 4BR MAROON	163.95
BH MALLARD A4 + 4BR MAROON	
COACHES	.E60.00
10360 GOODS SET WITH SIDINGS	£49.99
11006 STEAM GOODS SET	£45.99
11007 DIESEL PASSENGER SET	£69.99
FULL RANGE OF TRACK STOCKE	
	U

CATALOGUES	
ALL CATALOGUES POST PAID	
HORNBY 1990	£3.50
REPLICA 1990	£3.50
PECO 1990	£3.50
RATIO 1990	£2.75
SCALEXTRIC 1990	
WRENN 7th EDITION	£4.00
DAPOL 89/90	£4.00
LIMA 89/90	£3.50
FALLER 89/90	£3.75
PLAYMOBILE 89/90	£1.00
WILESCO 89/90	£3.00
HORNBY TRACK PLANS	£4.00
PECO OO TRACK PLANS	£3.00
GRAHAM FARISH 89/90	£3.00
PECO N TRACK PLANS	£1.50
MINITRIX N GAUGE	£3.75
SIGNAL BOX 1990	
WE CAN ALSO SUPPLY THE SOLLOW	INC

AL BOX 1990.

E CAN ALSO SUPPLY THE FOLLOWING N-LISTED PRODUCTS AT SUBSTANTIAL SAVINGS TRIX HO AND N GAUGE FLEISCHMANN HO AND N GAUGE BACHMANN HO AND N GAUGE BACHMANN GRANCHLINES GRAHAM FARISH LGB ROCCH O AND N GAUGE JUB

AUSTRALIA

AUSTRALIAN RAILWAY HISTORICAL SOCIETY

Is Australia's largest railfan organisation. Membership informa-tion can be obtained by writing to the membership officer in

oital city:-PO Box 112, Civic Square, ACT 2608 PO Box E129, St. James, NSW 2000 GPO Box 682, Brisbane, Qld 4001 GPO Box 507, Adelaide, SA 5001 PO Bpx 162, Sandy Bay, Tas. 7005 GPO 5177AA, Melbourne, Vic 3001 GPO Box S1319, Perth, WA 6001 SA TAS VIC WA

N.S.W. - WOLLONGONG

PAULMACKS HOBBIES and Model Train Service Centre

Model Trains HO and N - Accessories

Repairs and Spares
Mail Order C/-Coniston Post Office
24 Gregory Street, Coniston Ph. (042 Ph. (042) 29 8394 NSW-NEWCASTLE

VIC BARNES CYCLE & MODEL TRAIN CENTRE

Stocking OO, HO & N in British, European, USA and Australian Outline. Scenic items and much more — Repairs all makes
Authorised Hornby Service Agent, MAIL ORDER

> 213 Lambton Rd, New Lambton. 2305 Ph. (049) 52 1886 BANKCARD — VISA — MASTERCARD

A.C.T. - CANBERRA

LLOYD'S Ph. (062) 54 7958 MODEL MAIL ORDER SERVICE P.O. Box 57 RAILWAYS

LATHAM, A.C.T. Bankcard & Mastercard welcome

Showroom - inspection by appointment only

N.S.W. - BANKSTOWN

PUNCHBOWL HOBBY CENTRE

MAIL ORDERS — LAY-BY — & ALL MAJOR CREDIT CARDS ACCEPTED

545 Chapel Road Bankstown

Phone: (02) 709 5082

N.S.W. - NORTH PARRAMATTA

ANTON'S TRAINS

9.30 - 5.30Thurs & Friday Open: 9.30 - 1.00 Saturday

> Mail Order - Bankcard - Visa For all the Best in Model Trains

Cnr. Mary & Prince St, Nth, PARRAMATTA. 683 3858

A.C.T. - CANBERRA

HOBBY WORLD MODEL RAILWAY SPECIALISTS

- N - HOn - OO - Scales All the best brands are stocked Australian – British – European – An Also PHONE & MAIL ORDERS American

108 Bunda St., CANBERRA CITY ACT (062) 48 7994

N.S.W. - MINTO

MINTO HOBBIES & TOYS

9.00 - 5.00Monday - Friday Open: 9.00 - 9.00Thursday 9.00 - 2.00Saturday

Shop 3 Minto Mail, MINTO. 2566 Ph. (02) 603 3242 N.S.W. - PARRAMATTA

PIONEER FINESCALE MODELS

PIONEER FINESCALE MOUELS
Catering for the finescale modeller in HO, OO, EM & P4 Scales.
Supplying Alan Gibson, Exactoscale, MJT components, K&L
Track, finescale locomotive driving wheels, compensation components and Sagami/Portescap motors.
LOCOMOTIVE BUILDING SERVICE: Scratchbuilt to order or
kits assembled.
ETCHED BRASS CARRIAGE & WAGON BUILDING SERVICE
Send LARGE stamped addressed envelope for list to:
P.O. Box 3091, PARRAMATTA 2124 or Ph. (02) 683
5017.

N.S.W. - REDFERN

RAILWAY BOOKS
For the best and cheapest range of Australian and Overseas railway books. Send a large SAE for book lists (which change every month) or call into:-

ARHS SALES Upstairs 182 Redfern Street, Redfern, NSW. (PO Box E129, St James, NSW 2000)

Monday - Friday 1200 to 1730

Saturday - 0900 to 1600 Telephone and FAX (02) 699 1714

NSW - CENTRAL WEST

DEAN MODEL RAILWAYS

Serving The Central West Large Range of Australian, American, British, HO, OO, N Locomotives, Rollingstock, Track, Accessories

Kits, Scratchbuilding Supplies Books, Magazines, Videos, Tools MAIL ORDER WELCOME

60 LORDS PLACE, ORANGE. 2800 Phone (063) 62 1242

NSW - CORRIMAL

5" GAUGE Rolling Stock Components and Kits "NELSONGRAY" Auto Couplers Aust. Agent — Scale Railroad Supplies Inc. U.S.A. D. Hewson (Models) U.K. Stamped Addressed A4 Envelope for lists (0.80c)

SCOBIE & GLOVER SHEETMETAL Pty Ltd 31 Spinks Road, CORRIMAL. 2518. Ph.(042) 84 0294

N.S.W. - SYDNEY



FANTASTIC MODELSHOP

STRAND ARCADE BASEMENT Facing Pitt St Pedestrian Mall MAIL & PHONE ORDERS BY BANKCARD. Ph. (02) 232 2318 N.S.W. - GORDON & KINGSFORD

Model Railway Specialist conveniently located on Sydney's Northside with plenty of parking WALTHERS PREFFERED DEALER Overseas visitors ask about our tax free concessions

JORDAL HOBBIES PTY LTD Shop 1, 9-11 St. Johns Ave. GORDON. 2072. Phone (02) 498 3675 and 397 Anzac Parade, KINGSFORD. 2032. Phone (02) 662 1025

NSW - MORISSET

N.S.W. - PENDLE HILL

Shop 8/7 Joyce Street,

PENDLE HILL. 2145.

INDOOR CRICKET AND HOBBY CENTRE

Specialist in HO/HOn3, NSW, American, English

Kahibaha Street, MORISSET. NSW. (Next to Pool)

Open Sun-Wed 4.00pm - 9.00pm MAIL ORDER WELCOME THROUGH: Ph. (049) 73 3769
WINSTON'S MAIL ORDER HOBBIES PO Box 134, COORANBONG.

WOODPECKER

MODEL RAILWAYS

Phone (02) 636 3855

Monday - Saturday

N.S.W. - NEWCASTLE

LIVE STEAM Plans & Castings

For NSWGR C32, C36, C38, Z12, Z13, SMR 10 Class in 5" gauge. Over 60 designs 'O' to 7'4" gauge Our illustrated handbook \$5.00 posted from -

E. & J. Winter, P.O. Box 126, WALLSEND. 2287. N.S.W. - WEST PENNANT HILLS

MODEL RAILWAY SPECIALIST – LARGE RANGE OF HO.

MODEL RAILWAY SPECIALIST – LARGE RANGE OF HO.

HON2½ and N. TENSHODO SPUD, JAPANESE N SCALE
PRODUCTS.

MAIL ORDER WELCOME PLENTY OF PARKING.

OPEN SATURDAY AFTERNOON.

NORTHSIDE HOBBIES

Shop 18 Thorby's Arcade Thompsons Corner WEST PENNANT HILLS, 2120. Phone (02) 875 4487

N.S.W. - GYMEA

THE MODEL **RAILWAY CENTRE**



HO and N scale rolling stock, track, building kits and accessories. LAY-BY BANKCARD

Ph. (02) 524 8855

106 Gymea Bay Road, GYMEA.

N.S.W. - CENTRAL COAST MODEL RAILWAY SUPPLIER TO THE CENTRAL COAST Australian, European, British, American. Outline in HO, OO, N - also LGB.

Locomotives, Rollingstock, Kits, Accessories, Spares and Scratchbuilding Supplies. Repairs to all makes. Specialist Advise

ERINA TOYWORLD Shop 95, Central Coast Fair, ERINA. 2250. Ph. (043) 65 1131 Mail Orders Accepted VICTORIA - DANDENONG

255 THOMAS STREET near Scott Stree Phone (03) 791 7888

HOBBYLINE

A "sleeper" awakes!

N.S.W. - NARRABEEN

TRAIN TRADER



Buyers & Sellers of Quality Model Trains

Trading Hours: Tuesday to Friday 10am-6pm (Thurs. 8pm)
Saturday and First Sunday every month 10am-3pm.
15 Waterloo Street, (PO Box 115) Phone (02) 913 1362
NARRABEEN. NSW. 2101. FAX (02) 913 3760

N.S.W. - CHATSWOOD

FREE - Railway Video Catalogue from:-

Maxwell's Video Collection

2/47 Neridah Street, CHATSWOOD. 2067 Phone (02) 411 6949 MAIL ORDER OUR SPECIALITY

VICTORIA - TRARALGON

GIPPSLAND MODEL RAILWAYS

HO & N scale trains - new and used Service and repairs Call for information and times.
19 Leila St, TRARALGON 3844. Phone (051) 74 3468 VICTORIA - CROYDON

BRANCH LINE

Your Complete Model Railway Centre OVER 15,000 AUSTRALIAN, BRITISH, AMERICAN, EUROPEAN & JAPANESE HO OON NARROW GAUGE Z O & L G.B. ITEMS ALWAYS IN STOCK. Try our Custom painting and Repair Service PHONE, MAIL AND CREDIT CARD ORDERS WELCOME

490 Dorset Road, CROYDON, 3136. (03) 723 1211 VICTORIA - MONBULK

APIA MISSION MODEL RAILWAY

24 Moores Road, Monbulk. 3793.

Specialising in American Prototype.

Phone: (03) 756 6193 Roundhouse, Athearn, At-

las Large Display Open Weekends, Public and School Holidays

TOOWOOMBA TRAINS TOYS

A huge range of model railway kits and equipment for the enthusiast.

72 Russell St. Toowoomba. (PO Box 65 Drayton North) Qld. 4350. Phone: 076 38 5591 A/H 076 35 9210



VICTORIA - WARRAGUL

HOBBIES PLUS

HO & N scale trains — New & Used PLUS . . . Well, all sorts of things really. Open:- Monday - Friday 10am-5.30pm Saturday 9am-5.30pm Closed Sunday

Shop 5, 39 Princes Way, WARRAGUL. 3820. Phone (056) 23 2203

VICTORIA - MELBOURNE

VICTORIAN HOBBY CENTRE

21A (1st Floor) Swanston Street, Melbourne.

VICTORIA - BOX HILL

THE ENGINE SHED

5 Carrington Road Box Hill. 3128. (03) 890 7027 Adjacent to Box Hill

Station & Central

Shopping Complex

EXCLUSIVELY MODEL RAILWAYS

Bankcard - Mastercard - Visa - AMX - Mail Order

QUEENSLAND - BRISBANE

Largest range of Railway Stock in Queensland, Including Fleishmann, Roco, L.G.B.

O OO HO HO EN Z

Australian, British, European, American & Second Hand, BRISBANE'S BEST TRAIN SHOP

We BUY, sell, trade your Second Hand trains — any gauge & Quantity quantity

VALLEY TOYLAND

Fortitude Valley Centre Plaza, 4006 (07) 852 1005.

Leading Hobby Shop in Victoria. Stocking OO, HO, N & Z in British, European, USA & Australian Outline.

(03) 650 4817

S.A. - ADELAIDE

SOUTH **AUSTRALIAN** HOBBY CENTRE

Leading Hobby Shop in S.A. Specialising in HO, OO, N & Z in British, European, U.S.A., and Australian outline and all accessories. Bankcard, Visa, Mastercard, Mail Order or COD. 1st Floor, 135 Rundle Mall, ADELAIDE. (08) 232 0080

QUEENSLAND - BRISBANE

One of Brisbane's Better Hobby Shops Large Range of Model Railways Mail Orders Welcome

THE HOBBY CONNECTION

GABBA HOBBIES 622 Stanley St Woolloongabba 4102 Ph. (07) 844 7735

BRISBANE HOBBIES City Plaza Cnr George/Adelaide St Brisbane 4000 Ph. (07) 229 4495

VICTORIA - MELBOURNE

RAILFAN SHOP

Transport House 589 Collins Street Melbourne Victoria Australia 3000 03-619 4567

List Your Shop on These Pages for only \$140.00

per year. Over 51.000 opportunities per year to attract NEW CUSTOMERS QUEENSLAND-TOWNSVILLE

WAYNE'S TRAINS

AMERICAN **ENGLISH** Z - N - HO - S - O - LGB EUROPEAN ATLAS LOCOS, TRACK, ROLLING STOCK - ATHEARN, MANTUA, POWERLINE, CATNIP CONTROLLERS, KADEE, FLEISCHMANN, MARKLIN, PECO, ROUNDHOUSE, HELJAN, POLA, FALLER. BOOKS & MAGAZINES.

Andersons Newsagency Phone (077) 71 2651

451 Flinders Street, TOWNSVILLE, 4810

AUSTRALIAN

CROYDON - VICTORIA

RAILROADER SPARES & REPAIRS

MAIL ORDER SPECIALISTS

Triang Hornby Railways

94 Maroondah Highway, CROYDON, 3136. Phone (03) 725 0520 Postal: P.O. Box 346, CROYDON. 3136.

QUEENSLAND - NUNDAH

AUSTRALIAN PROTOTYPE SHOP

Scaleways, BGB, Silvermaz, AR Kit, Altas, Peco, Powerline, Sentinel & More Bankcard, Mastercard, Mail Order

THE TURNTABLE

C/-Joan-E-Gee, 88 Buckland Rd, Nundah 4012 Phone (07) 266 4547 Open 7 da

QUEENSLAND - STRATHPINE

BILL WEBB Model Railways Established 1975

MAIL ORDER SPECIALISTS for continental equipment from Fleischmann, Hag, Brawa, Seuthe Smoke generators, Bemo HOe, HOm, Metropolitan, Vollmer, Noche, Sommerfeldt Catenary HO & N, also Marklin.

PO Box 380, STRATHPINE, 4500. Ph. (07) 285 3883



273 Lonsdale Street, MELBOURNE. 3000 Phone (03) 663 2446 (Next to Myers)

QUEENSLAND - MANSFIELD

AUSTRAL MODELCRAFT

A large Range of HO and N scale in stock.

48 Morialta St, MANSFIELD. 4122 Ph. (07) 343 2138

QUEENSLAND - MAREEBA

MAREEBA TRAINLAND

Far North Queensland Visit this large Ho/OO Model Railway. You have to see the detail to believe it! Something there for ALL the Family. Open Weekend Only from 10am to 5pm. Kenneally Road, MAREEBA. 4880.

Phone (070) 92 1485 or (070) 92 2283.

VICTORIA - HAMPTON

JOYCA HOBBIES

Specialists in the sale and service of model railway equipment

> 465 Hampton St., Hampton, Vic. 3188 Ph. (03) 598 9768

QUEENSLAND - IFSWICH

IPSWICH MODEL TRAINS

Trading Hours — Friday 5pm — 9pm Saturday 9am — 2pm Other Times by Appointment Fully Serviced Model Train Shop 69 Glebe Rd, Silkstone, Ipswich 4304 Phone (07) 202 1040

W.A. -- PERTH

PERTH HOBBY CENTRE

Leading Hobby Shop in Western Australia Stocking OO, HO, N & Z in British, European, USA & Australian Outline.

385 Murray Street, Perth. Ph. (09) 322 3376

VICTORIA - EAST BRIGHTON

TRAIN WORLD

Open: Monday - Thursday 10.00 - 6.30pm
Friday 10.00 - 9.30pm Saturday 9.00 - 5.00pm
We stock Australian, British and American prototype.
Large range of books and magazines in stock. Large range of ready-to-run models and kits always in stock. 624 Hawthorne Road, EAST BRIGHTON. 3187. Phone (03) 596 6342

QUEENSLAND - WOLFFDENE

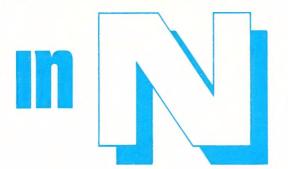
Visit Australia's Largest O Scale Model Railway. Hobby and Gift Shop All Good Brands
O HO HOE HOM N Z stockist.
THE TRAIN PLACE

Beenleigh-Beaudesert Rd WOLFFDENE Via BEENLEIGH. 4207. Ph. (075) 464 221 Open 9.30 - 5.00 Every Day SOUTH PACIFIC - NORFOLK ISLAND Lima, Faller, Preiser at Export Prices. Serving New Zealand, Australia and all of Oceania

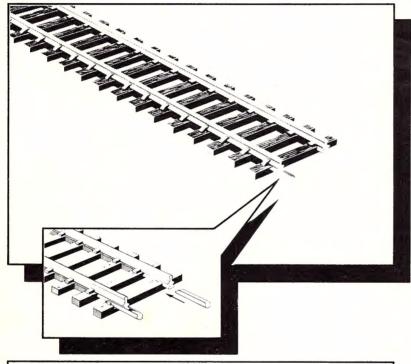
ABC HOBBY CENTRE

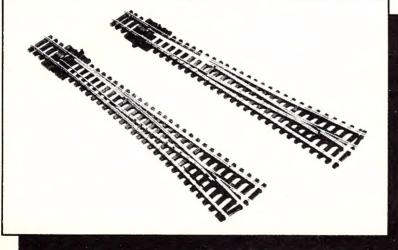
(Established since 1970)
P.O. Box 209, Taylor's Rd, NORFOLK ISLAND. 2899.
Phone Int. 672 3 2139 Fax Int. 672 3 2139 Int. 672 3 2139 Fax Int. 672 3 2139 No orders are too small or large Credit card, mail order welcome

EVEN GREATER REALISM



. with Peco Streamline Universal Fine





Despite the low visible rail heights of only .055" - all makes of British and Continental locomotives and rolling stock will run on Streamline Universal Fine trackage without modifications to the wheels.

Due to the clever design rail section (see illustration) Peco Universal Fine combines strength with super realism and can be readily joined to Peco Universal Standard N trackage.

Flexible Track

Universal Fine flexible track has the unique feature that whilst it is fully flexible, it is also 'semi-rigid', so that when curved it will hold the radius without having to be pinned down.

SL-300F Track, wooden sleeper type with Track, wooden sieeper type in nickel silver rail, 914mm (36") \$ 5.30

SL-310 SL-311 Rail joiners, insulating, 12

Turnouts — Electrofrog

The new Universal Fine turnouts incorporate all the famous Streamline features, over-centre sprung point blades etc, plus special sleepers to maintain correct spacing when joining to track or other turnouts. Standard N joiners SL-310 are used, so that they can easily be joined to your existing track.

SL-E395F R/H, medium radius \$ 16.50 SL-E396F L/H, medium radius

SL-E388F R/H, large radius $\}$ in preparation

Look for the yellow packs

So that you can easily identify the Fine Scale N Universal range, we have designed completely new packs for them. The Universal Standard range remains in the familiar blue boxes. See them both at your local Peco Stockist now.



